WESTERN'S GREEN CLEANING PROGRAM

I. GOALS

- 1. Reduce the exposure of building occupants, maintenance and caretaking personnel to potentially hazardous chemical, biological and particulate contaminants, which adversely affect air quality, human health, building finishes, building systems and the environment.
- 2. Assist Facilities Management to achieve a clean, safe and healthy built environment.
- 3. Reduce the environmental impact of cleaning products and processes used at Western.
- 4. Ensure an effective and efficient use of cleaning products and equipment

II. SCOPE

- 1. This policy applies to all interior spaces in buildings operated and controlled by Western University in London, Ontario, Canada.
- 2. Special provisions, as indicated under each section, are only applicable to LEED buildings

III. TIME PERIOD

As of September 1, 2013 this policy is applicable at all Western buildings at all times.

III. RESPONSIBLE PARTIES

Responsible Party	Responsibilities in the Cleaning Program	Frequency of participation/involvement
Director, Caretaking	1. Reviewing the policy	1. Annually
Services	Approving changes to the policy	2. As needed
	Working with managers, contractors and other parties involved to ensure proper training is provided to caretakers	3. As needed
Caretaking Training	1. Consolidate and analyse data from space audits	1. Twice per year
Co-ordinator and	2. Ensure timely and relevant training is provided to	2. As needed
Building Manager	all caretakers	
Caretaking Building	1. Enforcing of policies and procedures and assisting	1. As needed
Managers	caretakers when they have questions	2. Annually
	2. Ensuring caretakers take the necessary training	3. Twice per year
	3. Conduct audits to ensure the appropriate	
	procedures are followed and the areas meet APPA	
	Level 2 - Ordinary Tidiness	

Caretaking Leadhands	1. Enforcement of the appropriate policies and	1. As needed
	procedures and assisting caretakers when they have	2. As needed
	questions	
	2. Assistance and guidance to caretaking staff	
Caretaking staff	1. Using the cleaning products appropriately	1. Daily
	2. Following the policy and any related procedures	2. Daily
	3. Attending any necessary training	3. Annually
Stores staff	1. Preparing a report of the cleaning products being	1. Annually
	used in LEED buildings	
Contractors	1. Conform to Western's policies, procedures and	1. Daily
	requirements	
Compliance	1. Reviewing the results of the reports with Director,	1. Annually
Coordinator, Energy	Caretaking Services	
and Water Projects		

Caretaking Staff

The appropriate number of staff for each building is calculated APPA Operational Guidelines – Custodial, Chapter 5: Custodial Areas and Scheduling, as well as Appendix B – Standard Space Category Matrix. Staff is assigned in order to meet APPA Level 2 – Ordinary Tidiness appearance factors.

Staff Training

All new staff takes a two-day training covering all the items outlined under Western's Caretaking Training Manual. To ensure that caretakers remain informed and educated in products, equipment and procedures, building managers and lead hands are to maintain constant communication with caretakers. Likewise, as indicated in the Training Manual, caretakers are encouraged to confirm the appropriate procedures and use of products and equipment with lead hands and building managers whenever necessary.

The contents of staff training are outlined in detail under Western's Caretaking Training Manual. All employees, new and current are subject to the contents of this manual. The manual includes, but it's not limited to:

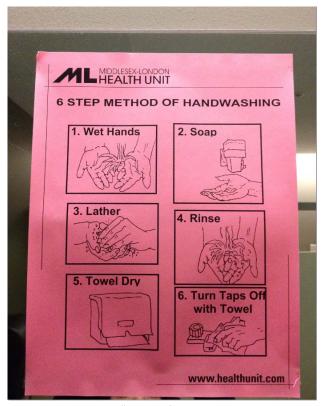
- Cleaning procedures for each space type on campus (e.g., wet labs, offices, dining areas)
- Guidelines addressing safe handling and storage of chemicals
- Dilution rates for chemicals
- Procedure to handle chemicals and address hazardous spills

Training specifically related to safety and the appropriate handling of products and the WHMIS program is provided by highly trained Occupational Health & Safety staff through e-Learning and in-person sessions, which are offered throughout the year. Also, one-on-one training is provided when, based on the findings under Western's Quality Assurance Program, the areas serviced by a caretaker consistently scored badly.

Hand Washing

Hand washing is promoted campus-wide to all of Western's community, including caretakers, by using different approaches:

- Posters located in all washrooms
 - Over the sink area, colorful signs present the proper hand washing techniques, which are developed by the Middlesex-London Health Unit:



"Proper hand-washing method" poster found in washrooms around campus.

o On the walls, another poster provides further information on hand washing:



"Areas missed in hand washing" poster found on washroom walls around campus.

• Posters in public spaces

In corridors and public spaces, Occupational Health & Safety (OH&S) installs posters with safety reminders, which are rotated on a weekly basis. One of them refers to hand washing:



Poster used by OH&S to promote hand washing.



Sample poster location used by OH&S to promote safety practices, including hand washing.

In addition, hand hygiene is promoted through the installation of waterless hand sanitizer dispensers that can be found in public spaces in all of Western's buildings.



Typical hand sanitizing station in one of Western's eateries.

IV. PERFORMANCE METRICS: GOALS

For LEED buildings:

Item	Performance Indicator	Goal
Purchase of cleaning and maintenance products that meet sustainability criteria as applicable	Percentage of conforming products purchased per year (on a cost basis)	60% of total annual purchases (by cost)
Purchase of disposable janitorial paper and trash bags that meet sustainability criteria as applicable	Percentage of conforming products purchased per year (on a per cost basis)	90% of total annual purchases (by cost)
Cleaning equipment that meet sustainability criteria as applicable	Percentage of equipment that meets the requirements of the policy	100% of total annual purchases (by cost)
Staff training	Percentage of caretakers that are versed in the appropriate use of cleaning products by the end of the fiscal year	100% of caretaking personnel
Verify the cleaning and maintenance products with sustainability criteria are being used	Annual report (from Avantis system) for individual buildings, showing all of the cleaning products used during that time period	Zero non- conforming products in use

For non-LEED buildings:

Item	Performance Indicator	Goal
Purchase of cleaning and maintenance products that meet sustainability criteria as applicable	Percentage of conforming products purchased per year (on a cost basis)	60% of total annual purchases (by cost)
Purchase of disposable janitorial paper and trash bags that meet sustainability criteria as applicable	Percentage of conforming products purchased per year (on a cost basis)	90% of total annual purchases (by cost)
Cleaning equipment that meet sustainability criteria as applicable	Percentage of equipment that meets the requirements of the policy	80% of total annual purchases (by cost)
Staff training	Percentage of caretakers that are versed in the appropriate use of cleaning products by the end of the fiscal year	100% of caretaking personnel
Verify the cleaning and maintenance products with sustainability criteria are being used	Annual report (from Avantis system) for individual buildings, showing all of the cleaning products used during that time period	80% of total annual purchases (by cost)

V. GUIDANCE FOR RESOURCES AND IMPLEMENTATION

V.1 PRODUCTS

Green Cleaning Product Use

Wherever feasible, cleaning products and materials, including hard floor and carpet care products, used in Western University's buildings shall meet the requirements of LEED® 2009 for Existing Buildings: Operations and Maintenance™ IEQ Credit 3.3: Green Cleaning, Purchase of Sustainable Cleaning Products and Materials as described below. In buildings certified or pursuing a certification, only sustainable products shall be used.

Sustainability Criteria

Disposable janitorial paper and trash bag products must meet the minimum requirements of one or more of the following programs for the applicable product category:

- 1. U.S. EPA Comprehensive Procurement Guidelines for Janitorial Paper and Paper Trash Can Liners
- 2. Green Seal GS-09, for paper towels and napkins
- 3. Green Seal GS-01, for tissue paper
- 4. Environmental Choice CCD-082, for toilet tissue
- 5. Environmental Choice CCD-086, for hand towels
- 6. Janitorial paper products derived from rapidly renewable resources or made from tree-free fibres

Cleaning and maintenance products, excluding janitorial paper products, must meet at least one of the following sustainability criteria:

- Cleaning products meet one or more of the following standards for the appropriate category:
 - Green Seal GS-37, for general purpose, bathroom, glass and carpet cleaners used for industrial and institutional purposes
 - o Environmental Choice CCD-110, for cleaning and degreasing compounds
 - o Environmental Choice CCD-146, for hard surface cleaners
 - o Environmental Choice CCD-148, for carpet and upholstery care
- Disinfectants, metal polish, floor finishes, strippers or other products not addressed by the above standards meet one or more of the following standards for the appropriate category:
 - o Green Seal GS-40, for industrial and institutional floor care products
 - o Environmental Choice CCD-112, for digestion additives cleaning and odour control
 - o Environmental Choice CCD-115, for odour control additives
 - o Environmental Choice CCD-147, for hard floor care
 - California Code of Regulations maximum allowable VOC levels for the specific product category
- Hand soaps must meet one or more of the following standards:

- No antimicrobial agents (other than as a preservative) except where required by health codes and other regulations (i.e., food service and health care requirements)
- o Green Seal GS-41, for industrial and institutional hand cleaners
- o Environmental Choice CCD-104, for hand cleaners and hand soaps
- If a new/additional product is needed for a specific application, the product shall meet the requirements outlined above.

Western purchases all of the cleaning products used in its buildings from Swish Maintenance Ltd. The products used in LEED buildings, as well as their documentation, can be found on Appendix A.

V.2 EQUIPMENT

Green Cleaning Equipment Use

Wherever feasible, cleaning products and materials, including hard floor and carpet care products, used in Western University's buildings shall meet the requirements of LEED® 2009 for Existing Buildings: Operations and Maintenance™ IEQ Credit 3.4: Sustainable Cleaning Equipment, as described below. In buildings certified or pursuing a certification, only sustainable cleaning equipment shall be used.

Sustainability Criteria

The cleaning equipment program must require the following, as applicable:

- 1. Vacuum cleaners are certified by the Carpet and Rug Institute "Green Label" Testing Program for vacuum cleaners and operate with a sound level of less than 70dBA
- 2. Carpet extraction equipment used for restorative deep cleaning is certified by the Carpet and Rug Institute's "Seal of Approval" Testing Program for deep-cleaning extractors
- 3. Powered floor maintenance equipment, including electric and battery-powered floor buffers and burnishers, is equipped with vacuum, guards and/or other devices for capturing fine particulates and operates with a sound level of less than 70dBA
- 4. Propane-powered floor equipment has high-efficiency, low-emissions engines with catalytic converters and mufflers that meet the California Air resources Board (CARB) or U.S. Environmental Protection Agency (EAP) standards for the specific engine size and operate with a sound level of less than 90dBA
- Automated scrubbing machines are equipped with variable-speed feed pumps and on-board chemical metering to optimize the use of cleaning fluids. Alternatively, the scrubbing machines use only tap water with no added cleaning products
- 6. Battery-powered equipment is equipped with environmentally preferable gel batteries
- 7. Powered equipment is ergonomically designed to minimize vibration, noise and user fatigue
- 8. Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces
- 9. Caretakers will receive training as follows:

- a. All caretakers, lead hands and building managers will attend a formal session on the proper use of cleaning products
- b. Retraining will occur when significant product and equipment changes occur.
- c. A record of staff training will be maintained.
- 10. Western's Director, Caretaking Services will monitor the performance of the program to ensure it remains current and that it is properly maintained
- 11. Building managers and/or lead hands will keep a log of all powered cleaning equipment to document the date the equipment was purchased and all repair/maintenance activities. Include vendor specification sheets for each type of equipment in use.

Western's target is to have 20% of all of its total cleaning equipment (by cost) to conform to the Sustainability Criteria outlined above in fiscal year 2017-18. All new cleaning equipment purchased and used in Western's buildings shall meet the Sustainability Criteria outlined under section V.2 of this document. For LEED® pursuing and certified buildings, 100% of the equipment used must meet sustainability guidelines.

The equipment inventory for Facilities Management (formerly called Physical Plant Division) is listed under the file called "PPD Inventory.mdb". This file is updated by one of Facilities Management's clerks, with information from the Director of Caretaking Services and his team.

The equipment owned by Facilities Management, including cleaning equipment, is inspected routinely by the users, who notify their supervisors when failure or malfunction occurs. Maintenance and repair is conducted in two ways:

- If the unit is still under warranty by the supplier or manufacturer, it is sent back to them
- If the manufacturer's/supplier's warranty has expired, Western's Motor Shop, under Operations & Management, maintains and repairs any powered cleaning equipment

V.3 ADDRESSING CHEMICAL SENSITIVITY

Some occupants might be highly sensitive to some chemicals. In those cases, Human Resources provides signage in the appropriate spaces, reminding other occupants and caretakers of their sensitivity. The cases are treated individually in order to ensure the specific sensitivity is addressed. Products related to the person's sensitivity are no longer used in the space and a suitable replacement is found.

VI. PROGRAM'S PERFORMANCE MEASUREMENT

- 1. The performance of the program shall be measured as per the performance metrics.
- 2. If goals are not being met, additional performance measurement and activities will be added to the program, to ensure goals are met while maintaining a reasonable level of documentation and supervision.

PERFORMANCE LOG (Campus Totals per Fiscal Year)

Item	Fiscal Year (May 1 – April 30)			ril 30)
	2012-3	2013-4	2014-5	2017-8
				(Target)
Purchase of cleaning and maintenance products	62%	62%	TBD ⁽¹⁾	70%
that meet sustainability criteria (e.g., Green Seal				
GS-37, Environmental Choice CCD-110), as				
applicable				
Purchase of disposable janitorial paper and trash	90%	90%	TBD ⁽¹⁾	90%
bags that meet the minimum requirements				
under Green Seal GS-09 or GS-01, as applicable				
Staff training	100%	100%	TBD ⁽¹⁾	100%
Sustainable cleaning equipment	10%	11%	TBD ⁽¹⁾	20%

⁽¹⁾ To Be Determined: Refers to the current fiscal year, ending on April 30th, 2015

VII. QUALITY ASSURANCE

The following principles shall guide the quality assurance processes and activities:

- 1. Transparency: The data is traceable and any modification (e.g., for processing) is clearly stated and documented.
- 2. Accuracy: The data properly reflects the operations undertaken during the period of time being reviewed.
- 3. Reliability: All the supporting systems are kept up to date and the persons collecting and processing the data are well trained for doing so.
- 4. Relevance: The data pertains to the period being reviewed and includes buildings that are a fair representation of Western's operations.

Quality assurance activities will include, but are not limited to:

- Annual review of the program and the Director's findings by the in-house LEED Green Associate or Associate Professional
- Avantis reports on products use shall be prepared by Stores personnel, not Caretaking personnel
- Sample visits to the sites by Director Caretaking and/or in-house LEED Green Associate or Associate Professional to observe caretakers' practices and procedures conform to the requirements set under both this program
- Further assistance from the in-house LEED Green Associate or Associate Professional will be available upon request to assess or improve the program
- Documentation of quality assurance activities, findings and actions to be taken as a result of an annual review of the program
- Building managers and lead hands will work closely with caretaking personnel to ensure the correct procedures and processes are followed. As per the Training Manual, caretakers can check with building managers or lead hands whenever they have a question on the appropriate use of a product or following a procedure.

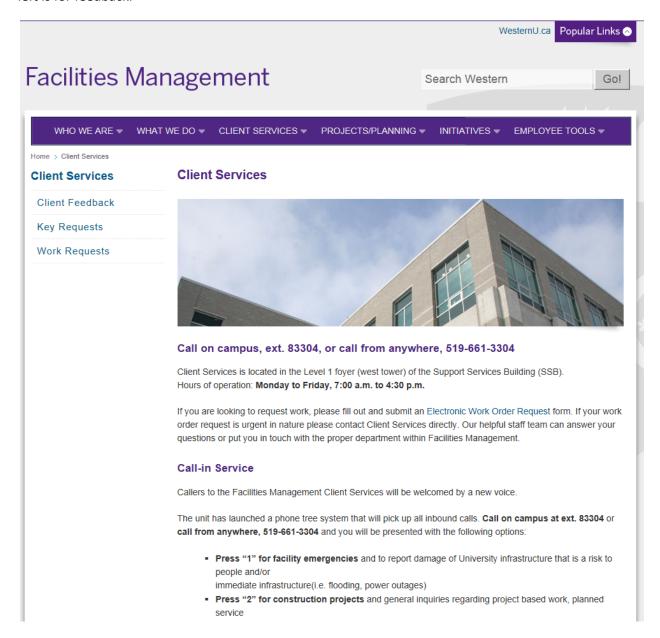
Western's Quality Assurance Program

Since 2010, Western implements a Quality Assurance Program for caretaking. Twice per year (during the fall and in spring), building managers conduct audits throughout the buildings, to ensure an APPA Level 2 - Ordinary Tidiness is met. The forms used in this process are enclosed under Appendix B. Information acquired from the audits is then consolidated and processed by Caretaking Training Co-ordinator & Building Manager. Spreadsheets are prepared, showing comparisons between buildings, space types and other relevant analysis. The information is then submitted to the Director, Caretaking Services.

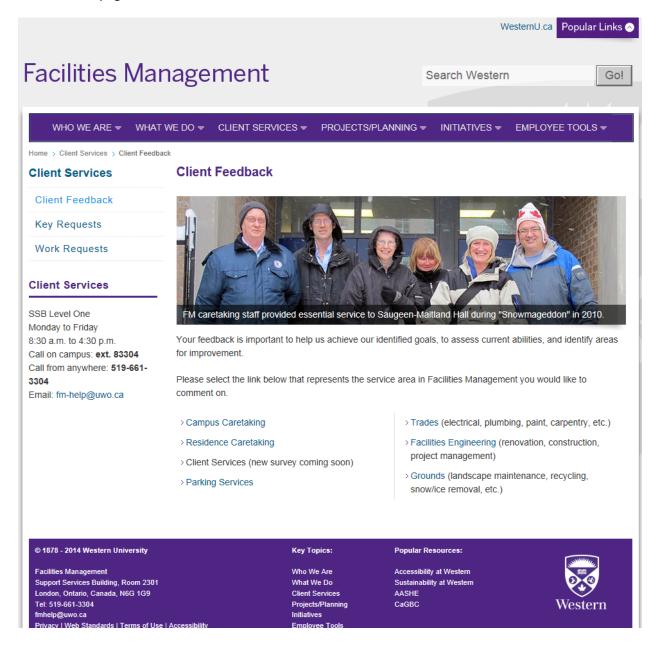
Using the findings from the analysis (e.g., which areas have repeatedly scored bad/well), the causes leading to those results are also looked into. Once they are determined and analysed as needed, corrective and preventive actions are taken to improve the performance in all buildings.

COLLECTING OCCUPANT FEEDBACK

Western now has an online feedback system for it clients: On Western's Facilities Management website (http://uwo.ca/fm/) there is a link to Client Services. The tab has a link to Client Services' main page (http://uwo.ca/fm/client_services/index.html). As shown on the screen shot below, the first link on the left is for feedback.



The feedback page is shown here:



Clients can visit the Client Services office, call them or send them an e-mail. Furthermore, by clicking on Campus Caretaking, clients are directed to a short survey:

					Exit this survey
Campus Caretaking (PPD-CC01)					
1. Campus Caretaking Services					
Campus Caretaking responsibilities are to main	tain a clean, safe environment for W	estern's faculty, staff, students and i	visitors leaving a positive impressio	0.	
Campus Caretaking is responsible for approxim					
Our services include looking after all of the Uni- entrances, laboratories, libraries, lounges, office	versity of Western Ontario cleaning r			lights, recycling and waste removal in su	ch areas as classrooms, corridors,
*1. Are you:					
O Faculty	O tin	dergraduate Student		Other	
○ Staff	O Alt		3		
Graduate Student	○ Vis				
*2. Please indicate your type of work area				0.00	
Office	O Cli	ssroom		Other	
○ Lab	O CR	ssroom			
*3. Please rate your satisfaction with our	services. Very Dissatisfied			Very Satisfied	Not Sure
Response time	0	•	Ö	O	
Frequency of cleaning	0	0	0	0	0
Quality of cleaning			0	•	0
Our professional staff	O	0	0	0	0
Overall level of service	0	•	0	0	0
Further comments are welcome					
Ĵ					
*4. Are you aware of the cleaning frequen Yes No	cy guide used across campus?				
5. What aspect or area of caretaking service	es do you feel provides the great	est opportunity for improvement	17		
~					
6. What do you feel are the cleaning priorit	ies in your area?				
0	,				
7. Within the past year, what aspects of car	retaking services have you appre	ciated?			
		Done			

The Director, Caretaking Services reviews the feedback received and follows up to provide attention to the concerns/comments provided by the clients.

Powered by <u>SurveyMonkey</u>
Check out our <u>sample surveys</u> and create your own now!

APPENDIX A. Products used for cleaning in LEED buildings

WASHROOM AND ODOUR CONTROL



CREAM CLEANSER

With Envirocide Odor Eliminator

- Smooth clinging cleanser that removes soap scum, body fats, grease and hard water salts from tubs, tiles and toilet bowls
- Cleans without harsh abrasives

DIRECTIONS:

GENERAL CLEANING:

For Tubs, Sinks, Toilets, Urinals and more

- Squeeze small amount on surface or in bowl
- Scrub with non-abrasive sponge, pad, or mop
- Rinse with water, wipe clean

SPECIALTY CLEANING:

For Rubber Marks, Grime Buildup, Whitewalls, and Porous Surfaces

- Allow to stand for 2 minutes
- Scrub with abrasive brush or pad
- Rinse clean

SIZES:

946 mL (1 U.S. quart)



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



BIODEGRADABILITY

(Decomposition of organic substances into carbon dioxide, water and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



NATURAL RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



CERTIFIED

Environmental Choice Program CCD-146J-Bathroom Cleaner



Distributed By:







MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cream Cleanser

Product Code: ES53

Product Use: Bathroom Cleaner

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070



Emergency Phone: CANUTEC (613) 996-6666

SECTION II – INFORMATION ON INGREDIENTS						
Ingredients	CAS#	WT%	ACGIH-TLV	<u>LD</u> ₅₀	<u>LC</u> 50	
Water	7732-18-5	30-60	Not applicable	90,000 mg/kg (Oral, Rat)	NA	
Calcium Carbonate	471-34-1	30-60	Not applicable	6,450 mg/kg (Oral, Rat)	NA	
Alcohol ethoxylates	NJ TRSN: 07613759-02	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA	
Sodium bicarbonate	144-55-8	1-5	Not applicable	7,300 mg/kg (Oral, Rat)	NA	
Silicic acid, lithium/magnesium/sodium salt	53320-86-8	1-5	Not applicable	8,000 mg/kg (Oral, Rat)	NA	
Sodium laureth sulfate	68585-34-2	0.1-1	Not applicable	>2,000 mg/kg (Oral, Rat)	NA	
Pine oil	8002-09-03	0.1-1	Not applicable	2,700 mg/kg (Oral, Rat)	NA	
Xanthan gum	11138-66-2	0.1-1	Not applicable	>5,000 mg/kg (Oral, Rat)	NA	
Isothiazolinone preservative	Mixture	0-0.1	Not applicable	NA	NA	
FD&C Blue #1	3844-45-9	0-0.1	Not applicable	NA	NA	

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation to those with sensitive skin.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV – FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops. Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited – ES53

SECTION V – FIRE FIGHTING MEASURES

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII – HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: If prolonged/repeated contact can occur, use protective gloves.

Eye protection: Where direct eye contact may be a problem, use chemical splash goggles.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Opaque blue; Pine. Physical State: Liquid

Boiling Point (°C): 100 Freezing Point (°C): NE % Volatile (Wt%): >50 Specific Gravity (H₂O=1): 1.36 VOC (g/L): 2.0 pH (as supplied): 8.20

Evaporation Rate (Water=1): Similar Viscosity: Viscous.

Coefficient of Water/Oil Distribution: NE Solubility in Water: Dispersible.

Vapor Pressure: NA

Vapor Density: NA

Vapor Density: NA

Odor Threshold: NE

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable. Incompatibility Materials: May react with acids.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon.

SECTION XI - TOXICOLOGICAL INFORMATION

LD₅₀: Not established for this product. LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII – ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are either biodegradable or readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. **T.D.G. Classification:** Not regulated under T.D.G. **D.O.T. Classification:** Not regulated under D.O.T.

SECTION XV – REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) - None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions Limited – ES53

WASHROOM AND ODOR CONTRO



LIKE ACID WASHROOM CLEANER

(With Envirocide Odor Eliminator)

- Safe, powerful cleaner that cuts through scale, rust and stains without the use of hydrochloric, phosphoric, citric, glycolic, sulfamic or oxalic acids.
- No harmful fumes or vapours
- Viscous/Thickened (not 56C)
- Contains Envirocide Foul Odor Eliminator to leave the washroom fresh and free of odors

DIRECTIONS:

TOILET BOWLS/URINALS

- Squeeze about 1.5 oz. (45mL) directly into the bowl, under the rim, and on the sides
- Let stand for about 2 minutes
- Scrub with bowl mop, flush
- Add final squeeze to Envirocide the bowl

SINKS, SHOWERS, FLOORS, OTHER WASHROOM SURFACES

- Apply diluted solution using cloth, sponge or mop.
- Let sit for 2 to 3 minutes.
- Wipe clean.
- Rinse thoroughly with potable water.

DILUTION RATES WITH COLD WATER:

56C

1:4 - Heavy

1:8 - Regular

(above dilutions are for bowls & urinals)

1:16 - Other Washroom Surfaces

NOTE: Improper use of dilutions may cause this product not to work properly and may increase the risk of health effects.

56C - 4.73 L (1.25 U.S. gallon) 56 - 3.78 L (1.0 U.S. gallon) RTU - 1.89 L (0.50 U.S. gallon) - 946 mL (1 U.S. quart) RTU

Dispose of used/unwanted product according to state and local regulations. Offer container for recycling.

NOTE: In case of spill, clean up immediately. Flush with large quantities of water. Avoid runoff into streams, sewers and ditches leading to natural waterways. Place leaking container in well ventilated area.

PERSONAL PROTECTION:

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye Protection: Use safety glasses when direct contact may occur.

CAUTION: Do not use on enameled or painted surfaces



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94-100%).



BIODEGRADABILITY

(Decomposition of organic substances into carbon dioxide, water and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



NATURAL RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



VERY LOW TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



Certified Hard Floor Care Program CCD-147



Distributed By:







Andified - 2012/06/12

www.enviro-solution.com



MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Like Acid Washroom Cleaner Concentrated

Product Code: ES56C

Product Use: Washroom Cleaner

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070





Emergency Phone: CANUTEC (613) 996-6666

SECTION II – INFORMATION ON INGREDIENTS					
Ingredients	CAS#	WT%	ACGIH-TLV	<u>LD</u> ₅₀	<u>LC₅₀</u>
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA
Organic salt	506-89-8	7-13	Not applicable	1,121 mg/kg (Oral, Rat)	NA
Alcohol ethoxylate	68991-48-0	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA
Sodium lactate	867-56-1	1-5	Not applicable	2,000 mg/kg (Oral, Rat)	NA
Fragrance	Mixture	0.1-1	Not applicable	>5,000 mg/kg (Oral, Rat)	NA
Lauryldimethylamine oxide	1643-20-5	0.1-1	Not applicable	2,700 mg/kg (Oral, Mouse)	NA
US Green	Mixture	0-0.1	Not applicable	>2,000 mg/kg (Oral, Rat)	NA

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation to those with sensitive skin.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV - FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. **Skin Contact:** Flush with water for 15 minutes. Seek medical attention if irritation develops. **Inhalation:** Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited – ES56C

SECTION V – FIRE FIGHTING MEASURES

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII – HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear Green; Floral.

Boiling Point (°C): NE

Specific Gravity (H₂O=1): 1.04

Evaporation Rate (Water=1): Similar

Coefficient of Water/Oil Distribution: NE

Vapor Pressure: NA

Physical State: Liquid % Volatile (Wt%): >50

pH (as supplied): 0.65

Viscosity: Water thin.

Solubility in Water: Soluble

Odor Threshold: NE

SECTION X - STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with strong alkaline and chlorine bleach.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀: Calculated >5,000 mg/kg (oral, rat). LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII – ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Results exceed standards set by recognized testing authorities for green products.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing.

T.D.G. Classification: Corrosive Liquid, Acidic, Inorganic, N.O.S., (Urea Monohydrochloride)

Class 8 UN 3265 PG III

D.O.T. Classification: Not regulated under D.O.T.

SECTION XV – REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B, E.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions Limited – ES56C

GENERAL PURPOSE AND SPECIALTY CLEANERS



SPRAY & WIPE CLEANER

- Spray on Wipe off
- Removes oil, food stains, fingerprints, etc.
- Leaves no residue

DIRECTIONS:

GENERAL CLEANING

- RTU Spray on wipe off with clean cloth
- No rinsing required
- For heavy duty cleaning, let penetrate for 1 2 minutes, then wipe off with clean cloth
- For use on most surfaces

SPECIALTY USES

• Excellent cleaner for black heel marks, grease, carbon exhaust, general stains, white wall tires, carpet and laundry spotter

CAUTION: Test colorfastness of surface before doing whole area

DILUTIONS:

74C

1:8

SIZES:

74C - 4.73 L (1.25 U.S. gallon)

- 1.89 L (0.50 U.S. gallon)

74 - 3.78 L (1.0 U.S. gallon)

- 946 mL (1 U.S. quart)



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



BIODEGRADABILITY

(Decomposition of organic substances into carbon dioxide, water, and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



NATURAL RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



CERTIFIED

Environmental Choice Program CCD-146-General



* Reg. TM of: Enviro-Solutions Ltd. Peterborough, Ontario K9J 8N4

Barre, VT 05641

Distributed By:









MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Spray and Wipe Cleaner Concentrated

Product Code: ES74C

Product Use: Hard Surface Cleaner

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

HMIS Hazard Rating					
HEALTH	1	0 – Insignificant			
FLAMMABILITY	0	1 – Slight			
REACTIVITY	0	2 – Moderate			
PERSONAL PROTECTION	В	3 – High 4 – Extreme			



Emergency Phone: CANUTEC (613) 996-6666

	ar ar	NOVIE IND	DALL FLOW ON INCOL	DIENEG	
	SECT	TION II – INFO	DRMATION ON INGRE	DIENTS	
<u>Ingredients</u>	CAS#	WT%	ACGIH-TLV	LD_{50}	<u>LC₅₀</u>
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA
Tetrasodium iminodisuccinate	144538-83-0	1-5	Not applicable	>2,000 mg/kg (oral, rat)	NA
Sodium carbonate	497-19-8	1-5	Not applicable	4,090 mg/kg (Oral, Rat)	NA
Surfactant	NJTSRN 360416-01	1-5	Not applicable	>5,000 mg/kg (Oral, rat)	NA
Complexing agent	NJTSRN 361102-02	1-5	Not applicable	>5,000 mg/kg (Oral, rat)	NA
Alcohol ethoxylate	68991-48-0	1-5	Not applicable	>2,000 mg/kg (Oral, rat)	NA
Fragrance	Mixture	0.1-1	Not applicable	NA	NA
FD&C Yellow #5	1934-21-0	0-0.1	Not applicable	12,750 mg/kg (Oral, Mouse)	NA

SECTION III – HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV – FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops. Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited – ES74C

SECTION V – FIRE FIGHTING MEASURES

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear yellow; citrus

Boiling Point (°C): 100

Specific Gravity (H₂O=1): 1.04

Evaporation Rate (Water=1): Similar

Freezing Point (°C): NE

VOC (g/L): 2.4

Physical State: Liquid
% Volatile (Wt%): >50
pH (as supplied): 11.30

Viscosity: Water thin.

Coefficient of Water/Oil Distribution:NESolubility in Water:SolubleVapor Pressure:NAVapor Density:NAOdor Threshold:NE

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with strong oxidizing agents.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀ (Calculated): 19,500 mg/kg (Oral, Rat). LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII – ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. **T.D.G. Classification:** Not regulated under T.D.G. **D.O.T. Classification:** Not regulated under D.O.T.

SECTION XV – REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) - None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI - OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton. Ontario (905-572-4400), or CST in Montreal, Ouebec (514-873-3990).

Enviro-Solutions Limited – ES74C

GENERAL PURPOSE AND SPECIALTY CLEANERS



HEAVY DUTY DEGREASER

- Concentrated cleaner for heavy duty cleaning
- Safe on most surfaces, moderate PH
- Easy rinsing
- Food Grade Approved
- Excellent meat room degreaser

DIRECTIONS:

GENERAL CLEANING

- Dilute 2 to 8 oz. to 1 U.S. gallon (3.78 L) of cold water
- Rinse if required

FLOOR WASHING

- Dilute 2 to 8 oz. to 1 U.S. gallon (3.78 L) of cold water
- For heavy application, double dilution
- · Apply solution with mop or automatic scrubber
- Rinse if required

PRESSURE WASHERS

- Set dilution at 1:40
- Apply solution at low pressure from bottom to top and rinse top to bottom at high pressure

DILUTION RATES WITH COLD WATER:

<u>75C</u> <u> 75</u> 1:128 - Light 1:32 - Light 1:32 – Regular 1:16 - Regular 1:16 - Heavy 1:8 - Heavy 1:8 - Spray and wipe 1:4 - Spray and wipe

NOTE: Improper use of dilutions may cause this product not to work properly and may increase the risk of health effects.

SIZES:

75C - 4.73 L (1.25 U.S. gallon) 75 - 3.78 L (1.0 U.S. gallon) - 1.89 L (0.50 U.S. gallon) - 18.9 L (5.0 U.S. gallon)

NOTE: In case of spill, clean up immediately. Flush with large quantities of water. Avoid runoff into streams, sewers and ditches leading to natural waterways. Place leaking container in well ventilated area.

DISPOSAL:

Dispose of used/unwanted product according to state and local regulations. Offer container for recycling.

PERSONAL PROTECTION:

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye Protection: Use safety glasses when direct contact may occur.



Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



READILY BIODEGRADABLE

(Decomposition of organic substances into carbon dioxide, water and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



NATURALLY DERIVED RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



VERY LOW TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



LOW AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



Certified Hard Surface Cleaner CCD-146



GS-37 CERTIFIED - (Concentrate Only/75C)

This product meets the Green Seal™ environmental standard for industrial and institutional cleaners based on its reduced human and environmental toxicity and reduced volatile organic compound content.



CFIA APPROVED

Canadian Food Inspection Agency approved letter of no objection.



Bio-Renewable - U.S.D.A. Bio-Preferred Program



Distributed By:



* Reg. TM of: Enviro-Solutions Ltd. Peterborough, Ontario K9J 8N4 New York, USA • Illinois, USA toll free: 1-877-674-4373 fax: (705) 745-7358 www.enviro-solution.com



MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Heavy Duty Degreaser Concentrated

Product Code: ES75C

Product Use: Heavy Duty Degreaser/ Cleaner

Manufacturer/Supplier: Enviro-Solutions
Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

HMIS Hazard Rating

HEALTH

1 0 - Insignificant

1 - Slight

REACTIVITY

0 2 - Moderate

3 - High

PROTECTION

B 4 - Extreme



Emergency Phone: CANUTEC (613) 996-6666

	CT CT					
SECTION II – INFORMATION ON INGREDIENTS						
<u>Ingredients</u>	CAS#	WT%	ACGIH-TLV	$\underline{\text{LD}}_{50}$	<u>LC₅₀</u>	
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA	
Alcohol ethoxylate	68991-48-0	5-10	Not applicable	>2,000 mg/kg (oral, rat)	NA	
Sodium tetraborate pentahydrate	12179-04-3	1-5	Not applicable	2,660 mg/kg (Oral, Rat)	NA	
Sodium gluconate	527-07-1	1-5	Not applicable	>2,000 mg/kg (oral, rat)	NA	
Sodium silicate	1344-09-8	1-5	Not applicable	>1,500 mg/kg (Oral, Rat)	NA	
Polyaspartic acid, sodium salt	181828-06-8	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA	
Sodium hydroxide	1310-73-2	0.1-1	Not applicable	500 mg/kg (Oral, Rat)	NA	
FD&C Red #40	25956-17-6	0-0.1	Not applicable	>5,000 mg/kg (Oral, Rat)	NA	

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV – FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists.

Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops.

Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions – ES75C

SECTION V – FIRE FIGHTING MEASURES

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear red; Mild.

Boiling Point (°C): 100

Specific Gravity (H₂O=1): 1.06

Evaporation Rate (Water=1): Similar
Coefficient of Water/Oil Distribution: NE
Vapor Pressure: NA

Physical State: Liquid % Volatile (Wt%): >50
pH (as supplied): 11.25
Viscosity: Water thin.
Solubility in Water: Soluble
Vapor Pensoure: NA

Odor Threshold: NE

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with strong oxidizing agents.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀ (Calculated): >5,000 mg/kg (Oral, Rat). LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII – ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Results exceed standards set by recognized testing authorities for green products.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. **T.D.G. Classification:** Not regulated under T.D.G. **D.O.T. Classification:** Not regulated under D.O.T.

SECTION XV – REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA - Section 102 (Reportable Quantity) 40 CFR 302 - None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI - OTHER INFORMATION

Date: July 9, 2013

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions – ES75C

GENERAL PURPOSE AND SPECIALTY CLEANERS



GLASS CLEANER

- Cleans windows, mirrors, chrome, countertops, plastic surfaces and more
- No streaking, no film
- Fast drying

DIRECTIONS:

GLASS & MIRRORS

- Spray a fine mist over entire surface
- Use soft, clean cloth or paper towel
- Spread and wipe clean

GENERAL CLEANER

• Excellent general spray and wipe cleaner for stainless steel, chrome, counter tops, plastic and most hard surfaces

DILUTION RATES WITH COLD WATER:

77NFP-C

1:32 - Regular

1:10 - Heavy

NOTE: Improper use of dilutions may cause this product not to work properly and may increase the risk of health effects.

SIZES:

77NFP-C - 4.73 L (1.25 U.S. gallon)

- 1.89 L (0.50 U.S. gallon)

77NFP - 3.78 L (1.0 U.S. gallon) RTU

- 946 mL (1 U.S. quart) RTU

DISPOSAL:

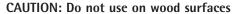
Dispose of used/unwanted product according to state and local regulations. Offer container for recycling.

NOTE: In case of spill, clean up immediately. Flush with large quantities of water. Avoid runoff into streams, sewers and ditches leading to natural waterways. Place leaking container in well ventilated area.

PERSONAL PROTECTION:

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye Protection: Use safety glasses when direct contact may occur.





PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



READILY BIODEGRADABLE

(Decomposition of organic substances into carbon dioxide, water and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



NATURALLY DERIVED RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



VERY LOW TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



LOW AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



Certified Hard Surface Cleaner CCD-146



* Reg. TM of: Enviro-Solutions Ltd.

Distributed By:







MATERIAL SAFETY DATA SHEET

PROTECTION

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Glass Cleaner (No Flash) Concentrated (Ready-To-Use)

Product Code: ES77CNFP

Glass and Multi Surface Cleaner **Product Use:**

Manufacturer/Supplier: **Enviro-Solutions Limited**

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

(705) 745-3070 **Telephone:**

HMIS Hazard Rating HEALTH 0 - Insignificant 1 - Slight 0 **FLAMMABILITY**

2 - Moderate 0 **REACTIVITY** 3 - High **PERSONAL** В

4 - Extreme

Emergency Phone: CANUTEC (613) 996-6666

SECTION II – INFORMATION ON INGREDIENTS Ingredients CAS# WT% ACGIH-TLV <u>LC</u>50 Water 7732-18-5 90-100 Not applicable 90,000 mg/kg (Oral, Rat) NA Surfactant NJ TSRN: 360416-01 0 - 0.1Not applicable >5,000 mg/kg (Oral, Rat) NA NJ TSRN: 361102-02 0 - 0.1Not applicable >5,000 mg/kg (Oral, Rat) NA Complexing Agent FD&C Blue #1 3844-45-9 0 - 0.1Not applicable 2,000 mg/kg (Oral, Rat) NA

SECTION III – HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation to those with sensitive skin.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV - FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. **Skin Contact:** Flush with water for 15 minutes. Seek medical attention if irritation develops. Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Page 1 of 2 Enviro-Solutions Limited - ES77CNFPRTU

SECTION V – FIRE FIGHTING MEASURES

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear, blue/purple; None.

Boiling Point (°C): 100 Freezing Point (°C): N Specific Gravity (H₂O=1): 1.00 VOC (g/L): 0

Evaporation Rate (Water=1): Similar Coefficient of Water/Oil Distribution: NE

Vapor Pressure: NA Vapor Den

one. Physical State: Liquid % Volatile (Wt%): >99
VOC (g/L): 0 pH (as supplied): 8.00

Viscosity: Water thin.
Solubility in Water: Soluble

Vapor Density: NA Odor Threshold: NE

SECTION X - STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with strong oxidizing agents.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀ (Calculated): 85,000 mg/kg (Oral, Rat). LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII – ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Not established for this product.

SECTION XIII - DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing.

T.D.G. Classification: Not regulated. **D.O.T. Classification:** Not regulated.

SECTION XV - REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations Under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA - Section 102 (Reportable Quantity) 40 CFR 302 - None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) - None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions Limited – ES77CNFPRTU

FLOOR CARE AND CARPET CARE



BARRICADE SEALER/ FLOOR FINISH

- An acrylic blend of polymers with excellent protective properties
- Resists the penetration of over 30 common staining and soiling agents
- · Excellent durability, ideal for scrub and recoat
- Recommended for spray buffing with floor machines up to 1000 RPM
- UL Approved for slip resistance

STRIP AND RECOAT

- Before application, remove old coatings with Enviro-Solutions #85 Scrub Free Stripper or #90 Clean Cut Concentrated Stripper
- Pick up stripper solution using a mop or wet vacuum.
- Thoroughly rinse and neutralize floor

- Apply 2 to 4 coats of Enviro-Solutions #82 Barricade Sealer/Floor Finish
- Allow at least 15 minutes after dry to touch between coats

SCRUB AND RECOAT

- Dry mop area
- Scrub with Enviro-Solutions #70 or #91, then rinse
- Apply Enviro-Solutions #82 Barricade Sealer/Floor Finish with a finish mop

BUFFING AND BURNISHING

 Ideal for buffing with floor machines up to 1000 RPM.

SIZES:

3.78 L (1.0 U.S. gallon) 18.9 L (5.0 U.S. gallon)

DISPOSAL:

Dispose of used/unwanted product according to state and local regulations. Offer container for recycling.

PERSONAL PROTECTION:

Refer to MSDS for suggestions and/or requirements.



PACKAGING

TOXICITY

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



HEALTH & SAFETY

Product contains a low odor, safe solvent and surfactant system.

Product does not contain:

Formaldehyde	CAS#	50-00-0
Glycol Ether DM	CAS#	111-77-3
Nonyl Phenol	CAS#	9016-45-9
Glycol Ether DE	CAS#	111-90-0
Dibutyl Phthalate	CAS#	87-74-2
Ethylene Glycol		
Monobutyl Ether	CAS#	111-76-2

Zinc or other heavy metals to disrupt the natural biodegradation process.



AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



CERTIFIED

Environmental Choice Program CCD-147A-Hard Floor Care Products



Floor coating and finishing material classified by Underwriters Laboratories Inc. as to slip resistance only 18RL FTM-1



Distributed By:



www.enviro-solution.com







MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Barricade Sealer / Floor Finish

Product Code: ES82

Product Use: Floor Sealer / Finish

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

Tilviio Hazard Rating					
HEALTH	1	0 - Insignificant			
FLAMMABILITY	0	1 – Slight			
REACTIVITY	0	2 – Moderate			
PERSONAL PROTECTION	В	3 – High 4 – Extreme			

HMIS Hazard Pating

Emergency Phone: CANUTEC (613) 996-6666

SECTION II – INFORMATION ON INGREDIENTS							
Ingredients	CAS#	WT%	ACGIH-TLV	<u>LD</u> ₅₀	<u>LC₅₀</u>		
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA		
Acrylic Polymer	Mixture	10-30	Not applicable	>5,000 mg/kg (Oral, Rat)	NA		
Dipropylene glycol methyl ether	34590-94-8	1-5	100 ppm TWA	5,200 mg/kg (Oral, Rat)	NA		
Diethylene glycol butyl ether	112-34-5	1-5	Not applicable	3,384 mg/kg (Oral, Rat)	NA		
Polyethylene emulsion	Mixture	1-5	Not applicable	NA	NA		
Propylene glycol phenyl ether	770-35-4	0.1-1	Not applicable	>2,000 mg/kg (Oral, Rat)	NA		
Tributoxyethyl phosphate	78-51-3	0.1-1	Not applicable	>2,000 mg/kg (Oral, Rat)	NA		
Ethoxylated alcohol sulfate, sodium salt	68585-34-2	0.1-1	Not applicable	>2,000 mg/kg (Oral, Rat)	NA		
Acrylic terpolymer, ammonium salt	Mixture	0.1-1	Not applicable	NA	NA		
Dimethyl siloxanes and silicones	Mixture	< 0.5	Not applicable	NA	NA		
Isothiazolinone preservative	Mixture	< 0.5	Not applicable	3,810 mg/kg (Oral, Rat)	NA		
Fragrance	Mixture	< 0.5	Not applicable	>5,000 mg/kg (Oral, Rat)	NA		
Telomer B monoether with polyethylene glycol	65545-80-4	< 0.5	Not applicable	>17,000 mg/kg (Oral, Rat)	NA		

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation to those with sensitive skin.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV – FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists.

Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops.

Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited - ES82

SECTION V – FIRE FIGHTING MEASURES

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon, oxides of nitrogen. **Means of Extinction:** Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. Explosion Data – Sensitivity to Static Discharge: None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: White emulsion; Mild acrylic.

Boiling Point (°C): 100

Freezing Point (°C): NE

Specific Gravity (H₂O=1): 1.02

VOC (g/L): 56

Evaporation Rate (Water=1): Similar

Coefficient of Water/Oil Distribution: NE

Vapor Pressure: NA

Solubility in Water: Emulsifiable

Vapor Density: NA

Odor Threshold: NE

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: Strong oxidizing agents, strong acids and alkalis.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon, oxides of nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀: >5,000 mg/kg (oral, rat).

LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII - ECOLOGICAL INFORMATION

Biodegradability: Not established for this product. **Aquatic Acute Toxicity:** Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. T.D.G. Classification: Not regulated under T.D.G. D.O.T. Classification: Not regulated under D.O.T.

SECTION XV - REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: Not controlled under WHMIS.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations Under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – Diethylene glycol monoethyl ether is listed as Glycol Ether.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – Diethylene glycol monoethyl ether is listed as Glycol Ether.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI - OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions Limited - ES82

FLOOR CARE AND CARPET CARE



HAZE AWAY NEUTRAL FLOOR CLEANER CONCENTRATE

- Removes white film of ice melt chemicals deposited at entrance ways
- Demineralizes salt deposits on floor
- Reduces slip hazards by eliminating the ice melt film which attracts water
- UL Classified for slip resistance 18RL

DIRECTIONS:

For routine winter use, add 1 part Haze Away to 80 parts cool water (12.5 ml. per litre of water or 1.5 oz. per gallon). Mop daily.

For heavy film, add 1 part Haze Away to 40 parts cool water (25 ml. per litre of water or 3 oz. per gallon). Apply mixed solution liberally with mop; allow to soak a few minutes. Wring out mop and pick up dissolved ice melt. Can also be used in automatic scrubbers For ice melt and rock salt stains in carpets, add 1 part Haze Away to 62 parts carpet extractor rinse water (16 ml. per 1 litre of rinse water)

DILUTIONS:

<u>83C</u>

1:160

1:80

SIZES:

83C - 4.73 L (1.25 U.S. gallon)

83 - 3.78 L (1.0 U.S. gallon)



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



NATURAL RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



BIODEGRADABILITY

(Decomposition of organic substances into carbon dioxide, water, and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



CERTIFIED

Environmental Choice Program CCD-146-General



Floor coating and finishing material classified by Underwriters Laboratories Inc. as to slip resistance only 18RL FTM-3



Distributed By:







MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Haze Away Neutral Floor Cleaner

Product Code: ES83

Product Use: Floor Cleaner for Ice Melt

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

HMIS Hazard Rating

HEALTH

1 0 - Insignificant

FLAMMABILITY
0 1 - Slight
2 - Moderate
3 - High
PROTECTION
B 4 - Extreme



Emergency Phone: CANUTEC (613) 996-6666

SECTION II – INFORMATION ON INGREDIENTS								
Ingredients	CAS#	WT%	ACGIH-TLV	LD ₅₀	<u>LC</u> 50			
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA			
Sodium citrate	68-04-2	10-30	Not applicable	>8,000 mg/kg (Oral, Rat)	NA			
Alcohol ethoxylate	NJ TRSN: 07613759-02	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA			
Cocamidopropyl betaine	61789-40-0	0.1-1	Not applicable	2,700 mg/kg (Oral, Rat)	NA			
Fragrance	Mixture	0.1-1	Not applicable	NA	NA			
D&C Green #5	4403-90-1	0-0.1	Not applicable	10,000 mg/kg (Oral, Rat)	NA			
FD&C Yellow #5	1934-21-0	0-0.1	Not applicable	12.750 mg/kg (Oral Mouse)	NA			

SECTION III – HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation to those with sensitive skin.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV - FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists.

Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops.

Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited - ES83

SECTION V – FIRE FIGHTING MEASURES

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII – EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Green; floral.

Boiling Point (°C): 100

Specific Gravity (H₂O=1): 1.05

Evaporation Rate (Water=1): Similar
Coefficient of Water/Oil Distribution: NE
Vapor Pressure: NA

Physical State: Liquid % Volatile (Wt%): >50

Ph (as supplied): 8.30

Viscosity: Water thin.
Solubility in Water: Soluble
Odor Threshold: NE
Odor Threshold: NE

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with acids.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀: Not established for this product. LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII - ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are either biodegradable or readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. **T.D.G. Classification:** Not regulated under T.D.G. **D.O.T. Classification:** Not regulated under DO.T.

SECTION XV – REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions Limited - ES83



NEUTRAL FLOOR CLEANER With Envirocide Odor Eliminator

- Lifts the dirt Leaves the shine
- Excellent for daily or weekly maintenance
- No rinsing. Contains no alkaline builders to leave a residue
- Contains Envirocide Odor Eliminator

DIRECTIONS:

Enviro-Solutions #84 is an integral part of the Enviro-Solutions floor care program

- Use as a daily cleaner on all resilient and stone floors
- Dust mop area before cleaning

DILUTION RATES WITH COLD WATER:

84C 1:325 - 1:256

<u>84</u> 1:128 - 1:21

NOTE: Improper use of dilutions may cause this product not to work properly and may increase the risk of health effects.

SIZES:

84C - 4.73 L (1.25 U.S. gallon) 84 - 3.78 L (1.0 U.S. gallon) - 1.89 L (0.50 U.S. gallon) - 18.9 L (5.0 U.S. gallon)

DISPOSAL:

Dispose of used/unwanted product according to state and local regulations. Offer container for recycling.

NOTE: In case of spill, clean up immediately. Flush with large quantities of water. Avoid runoff into streams, sewers and ditches leading to natural waterways. Place leaking container in well ventilated area.

PERSONAL PROTECTION:

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye Protection: Use safety glasses when direct contact may occur.



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



READILY BIODEGRADABLE

(Decomposition of organic substances into carbon dioxide, water and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



NATURALLY DERIVED RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



VERY LOW TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



LOW AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



Certified Hard Surface Cleaner CCD-146



GS-37 CERTIFIED - (Concentrate Only)

This product meets the Green Seal™ environmental standard for industrial and institutional cleaners based on its reduced human and environmental toxicity and reduced volatile organic compound content.



Bio-Renewable - U.S.D.A. Bio-Preferred Program









SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Neutral Floor Cleaner Concentrated

Product Code: ES84C

Product Use: Floor Cleaner

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

HMIS Hazard Rating

HEALTH

1 0 - Insignificant

FLAMMABILITY
0 1 - Slight
2 - Moderate
3 - High
PROTECTION

B 4 - Extreme



Emergency Phone: CANUTEC (613) 996-6666

SECTION II – INFORMATION ON INGREDIENTS

820.	101111	JILI III I I I I I I I I I I I I I I I I	JEI I N		
CAS#	WT%	ACGIH-TLV	<u>LD₅₀</u>	<u>LC₅₀</u>	
7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA	
NJ TRSN: 07613759-02	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA	
64-17-5	1-5	1000 ppm TWA	9,000 mg/kg (Oral, Rat)	NA	
68-04-2	1-5	Not applicable	>8,000 mg/kg (Oral, Rat)	NA	
NJ TSRN: 07613294-01	1-5	Not applicable	2,500 mg/kg (Oral, Mouse)	NA	
68551-13-3	1-5	Not applicable	NA	NA	
57-55-6	1-5	Not applicable	18,300 mg/kg (Oral, Rat)	NA	
77-92-9	0.1-1	Not applicable	3,000 mg/kg (Oral, Rat)	NA	
Mixture	0-0.1	Not applicable	>5,000 mg/kg (Oral, Rat)	NA	
Mixture	0-0.1	Not applicable	NA	NA	
1934-21-0	0-0.1	Not applicable	12,750 mg/kg (Oral, Mouse)	NA	
	7732-18-5 NJ TRSN: 07613759-02 64-17-5 68-04-2 NJ TSRN: 07613294-01 68551-13-3 57-55-6 77-92-9 Mixture Mixture	7732-18-5 60-100 NJ TRSN: 07613759-02 1-5 64-17-5 1-5 68-04-2 1-5 NJ TSRN: 07613294-01 1-5 68551-13-3 1-5 57-55-6 1-5 77-92-9 0.1-1 Mixture 0-0.1 Mixture 0-0.1	7732-18-5 60-100 Not applicable NJ TRSN: 07613759-02 1-5 Not applicable 64-17-5 1-5 1000 ppm TWA 68-04-2 1-5 Not applicable NJ TSRN: 07613294-01 1-5 Not applicable 68551-13-3 1-5 Not applicable 68551-13-3 1-5 Not applicable 77-92-9 0.1-1 Not applicable Mixture 0-0.1 Not applicable Mixture 0-0.1 Not applicable Mixture 0-0.1 Not applicable	7732-18-5 60-100 Not applicable 90,000 mg/kg (Oral, Rat) NJ TRSN: 07613759-02 1-5 Not applicable >2,000 mg/kg (Oral, Rat) 64-17-5 1-5 1000 ppm TWA 9,000 mg/kg (Oral, Rat) 68-04-2 1-5 Not applicable >8,000 mg/kg (Oral, Rat) NJ TSRN: 07613294-01 1-5 Not applicable 2,500 mg/kg (Oral, Mouse) 68551-13-3 1-5 Not applicable NA 57-55-6 1-5 Not applicable 18,300 mg/kg (Oral, Rat) 77-92-9 0.1-1 Not applicable 3,000 mg/kg (Oral, Rat) Mixture 0-0.1 Not applicable >5,000 mg/kg (Oral, Rat) Mixture 0-0.1 Not applicable NA	7732-18-5 60-100 Not applicable 90,000 mg/kg (Oral, Rat) NA NJ TRSN: 07613759-02 1-5 Not applicable >2,000 mg/kg (Oral, Rat) NA 64-17-5 1-5 1000 ppm TWA 9,000 mg/kg (Oral, Rat) NA 68-04-2 1-5 Not applicable >8,000 mg/kg (Oral, Rat) NA NJ TSRN: 07613294-01 1-5 Not applicable 2,500 mg/kg (Oral, Mouse) NA 68551-13-3 1-5 Not applicable NA NA 57-55-6 1-5 Not applicable 18,300 mg/kg (Oral, Rat) NA 77-92-9 0.1-1 Not applicable 3,000 mg/kg (Oral, Rat) NA Mixture 0-0.1 Not applicable >5,000 mg/kg (Oral, Rat) NA Mixture 0-0.1 Not applicable >5,000 mg/kg (Oral, Rat) NA

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation to those with sensitive skin.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV - FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops. Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited - ES84C

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII – EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear, yellow; Floral
Boiling Point (°C): 100
Freezing Point (°C): NE
Specific Gravity (H2O=1): 1.04
VOC (g/L): 90
Evaporation Rate (Water=1): Similar
Coefficient of Water/Oil Distribution: NE
Vapor Pressure: NA
Vapor Density: NA
Physical State: Liquid
% Volatile (Wt%): >75
pH (as supplied): 7.65
Viscosity: Water thin.
Solubility in Water: Soluble
Odor Threshold: NE

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with strong oxidizing agents.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀ (Calculated): 11,300 mg/kg (Oral, Rat). LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII - ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are either biodegradable or readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. **T.D.G. Classification:** Not regulated under T.D.G. **D.O.T. Classification:** Not regulated under D.O.T.

SECTION XV – REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions Limited - ES84C



CARPET EXTRACTION CLEANER

With Envirocide Odor Eliminator

- · Unique blend of cleaning agents to break down embedded soils and emulsify them into solution
- Fortified with Envirocide Odor Eliminator to keep carpets fresh
- No sticky residue left behind therefore no re-soiling propensity due to the chemical.
- Can also be used as a bonnet cleaner.

USAGE INSTRUCTIONS:

- Vacuum carpet thoroughly
- If required, pre-spray heavily soiled areas with Enviro-Solutions #88 or #92 Carpet Spot and Stain Remover. Allow pre-spray to penetrate 5-10 minutes. No longer than 10 minutes as dry-back may occur

- Dilute 2 oz. (59 mL), 4 oz. (118 mL) or 6 oz. (180 mL) light, medium or heavy of Enviro-Solutions #87 to 1 gallon U.S. (3.78 L) of cold water
- Inject and extract solution
- Allow carpet to dry quickly, use air movers if required
- Vacumn thoroughly after carpet dries to remove any remaining residue
- "Asthmatics" and other "chemically sensitive" individuals should avoid areas recently cleaned for a period of 24 hours

NOTE: Improper use of dilutions may cause this product not to work properly and may increase the risk of health effects.

3.78 L (1.0 U.S. gallon) 1.89 L (0.50 U.S. gallon)

DISPOSAL:

Dispose of used/unwanted product according to state and local regulations. Offer container for recycling.

NOTE: In case of spill, clean up immediately. Flush with large quantities of water. Avoid runoff into streams, sewers and ditches leading to natural waterways. Place leaking container in well ventilated area.

PERSONAL PROTECTION:

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin. Eye Protection: Use safety glasses when direct contact may occur.

CAUTION: Always test for colour fastness



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



READILY BIODEGRADABLE

(Decomposition of organic substances into carbon dioxide, water and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists.



Non-flammable and non-corrosive at use dilution.



NATURALLY DERIVED RENEWABLE RESOURCES Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



VFRY LOW TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



LOW AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



SEAL OF APPROVAL

Carpet & Rug Institute



Certified Carpet and Upholstery Care Products



GS-37 CERTIFIED

This product meets the Green Seal™ environmental standard for industrial and institutional cleaners based on its reduced human and environmental toxicity and reduced volatile organic compound content.









SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Carpet Extraction Cleaner

Product Code: ES87

Product Use: Carpet Cleaner

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

HMIS Hazard Rating

HEALTH

1 0 - Insignificant

1 - Slight

REACTIVITY

0 2 - Moderate
3 - High

PROTECTION

B 4 - Extreme



Emergency Phone: CANUTEC (613) 996-6666

	SECT	TION II – INFO	DRMATION ON INGRE	CDIENTS	
Ingredients	CAS#	WT%	ACGIH-TLV	$\underline{\mathrm{LD}}_{50}$	<u>LC₅₀</u>
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA
Alcohol ethoxylate	68991-48-0	3-7	Not applicable	>2,000 mg/kg (Oral, Rat)	NA
Sodium tetraborate pentahydrate	12179-04-3	1-5	Not applicable	2,660 mg/kg (Oral, Rat)	NA
Sodium gluconate	527-07-1	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA
Sodium bicarbonate	144-55-8	1-5	Not applicable	7,300 mg/kg (Oral, Rat)	NA
Sodium carbonate	497-19-8	1-5	Not applicable	4,090 mg/kg (Oral, Rat)	NA
Fragrance	Mixture	0-1	Not applicable	>5,000 mg/kg (Oral, Rat)	NA

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact. **Skin Contact:** May cause mild to moderate irritation to those with sensitive skin.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV - FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops. Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited - ES87

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear, turquoise; Mild

Boiling Point (°C): 100

Specific Gravity (H₂O=1): 1.06

Evaporation Rate (Water=1): Similar

Coefficient of Water/Oil Distribution: NE

Vapor Pressure: NA

Physical State: Liquid
% Volatile (Wt%): >50
pH (as supplied): 9.70
Viscosity: Water thin.
Solubility in Water: Soluble
Odor Threshold: NE

SECTION X - STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with acids.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀: Not established for this product. LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII - ECOLOGICAL INFORMATION

Biodegradability: Not established for this product. **Aquatic Acute Toxicity:** Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. T.D.G. Classification: Not regulated under T.D.G. D.O.T. Classification: Not regulated under D.O.T.

SECTION XV - REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) - All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions Limited - ES87



SPOT & STAIN REMOVER

- Great for oils, inks and general soils
- Concentrated stain remover and pre-spray
- Penetrates and dissolves most stains and soils on carpets and soiled laundry
- With Envirocide Odor Eliminator

DIRECTIONS:

CARPETS AND UPHOLSTERY

- Spray liberally on stained area and 3" to 5" around the stained area
- Dab area with clean, white cloth until excess liquid is absorbed
- Extract with clean, hot water
- · Repeat if necessary after complete drying

CARPET EXTRACTION PRE-SPRAY

- Dilute 32 oz. (946 mL) into 1 gallon U.S. (3.78 L) of cold water
- Spray onto soiled traffic areas. Allow pre-spray to penetrate 5-10 minutes. No longer than 10 minutes as dry-back may occur. Extract with clean water
- Vacumn thoroughly after carpet dries to remove any remaining residue
- "Asthmatics" and other "chemically sensitive" individuals should avoid areas recently cleaned for a period of 24 hours

LAUNDRY

- Spray directly on stained area, saturating it
- Agitate Stain Remover on soiled area and allow to stand for 1 minute
- Launder normally using warmest water possible
- Repeat if necessary after complete drying

SIZES:

946 mL (1 U.S. quart)

CAUTION: Always test for colour fastness



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



BIODEGRADABILITY

(Decomposition of organic substances into carbon dioxide, water and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



NATURAL RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



VERY LOW TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



Certified Carpet and Upholstery Care Products CCD-148



Bio-Renewable - U.S.D.A. Bio-Preferred Program









SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Spot & Stain Remover

Product Code: ES88

Product Use: Spot & Stain Remover

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Mixture

0 - 0.1

Telephone: (705) 745-3070

HMIS Hazard Rating

HEALTH

1 0 - Insignificant

FLAMMABILITY
0 1 - Slight

REACTIVITY
0 2 - Moderate
3 - High

PROTECTION
B 4 - Extreme



Emergency Phone: CANUTEC (613) 996-6666

SECTION II – INFORMATION ON INGREDIENTS						
Ingredients	CAS#	WT%	ACGIH-TLV	<u>LD₅₀</u>	<u>LC₅₀</u>	
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA	
Sodium tetraborate pentahydrate	12179-04-3	1-5	Not applicable	2,660 mg/kg (Oral, Rat)	NA	
Sodium gluconate	527-07-1	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA	
Sodium bicarbonate	144-55-8	1-5	Not applicable	7,300 mg/kg (Oral, Rat)	NA	
Surfactant	NJ TSRN: 360416-01	1-5	Not applicable	>5,000 mg/kg (Oral, Rat)	NA	
Complexing agent	NJ TSRN: 361102-02	1-5	Not applicable	>5,000 mg/kg (Oral, Rat)	NA	
Dipropylene glycol methyl ether	34590-94-8	1-5	100 ppm TWA	5,200 mg/kg (Oral, Rat)	NA	
Sodium carbonate	497-19-8	1-5	Not applicable	4,090 mg/kg (Oral, Rat)	NA	

Not applicable

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Fragrance

Eye Contact: May cause mild irritation upon direct contact.

Skin Contact: May cause mild irritation.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV - FIRST AID MEASURES

NA

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops. Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

>5,000 mg/kg (Oral, Rat)

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited - ES88

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII – HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. **Engineering Controls:** General ventilation normally adequate.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear, colorless; MildPhysical State: LiquidBoiling Point (°C): 100Freezing Point (°C): NE% Volatile (Wt%): >50Specific Gravity (H2O=1): 1.07VOC (g/L): 56pH (as supplied): 9.90Evaporation Rate (Water=1): SimilarViscosity: Water thin.Coefficient of Water/Oil Distribution: NESolubility in Water: Soluble

Vapor Pressure: NA Vapor Density: NA Odor Threshold: NE

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with acids and strong oxidizing agents.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀: Not established for this product. LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII – ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are either biodegradable or readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. T.D.G. Classification: Not regulated under T.D.G. D.O.T. Classification: Not regulated under D.O.T.

SECTION XV – REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed

RCRA 40CFR 261 (SUBPART D) - None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solutions Limited - ES88



CLEAN CUT

Concentrated Floor Stripper

- A highly active concentrated stripper that is fast acting, economical and easy to use
- Very low odor

DILUTION: USE COLD WATER

Heavy Build Up = 1 Part Clean Cut to 13 parts cold water Light Build Up = 1 Part Clean Cut to 24 parts cold water

APPLICATION: FOR MACHINE & SCRUB FREE STRIPPING

- Dry mop to remove loose soil
- Apply diluted stripping solution liberally with wet mop
 * Keep floor wet
- Pick up with wet vac or mop
- Rinse
- Let floor dry
- · Apply new finish

• Let floor dry

• Pick up with wet vac or mop

Apply new finish

• Keep floor wet

CAUTION

Rinse

When stripping linoleum, asphalt or rubber tiles, discoloration or softening may occur. Test small area first

APPLICATION: FOR MACHINE SCRUBBING
 After 5-10 minutes of solution on floor, scrub

SIZES:

946 mL (1.0 U.S. quart) 18.9 L (5.0 U.S. gallon)

4.73 L (1.25 U.S. gallon) 1.89 L (0.50 U.S. gallon)

DISPOSAL:

Dispose of used/unwanted product according to state and local regulations. Offer container for recycling.

PERSONAL PROTECTION:

NATURAL RENEWABLE RESOURCES

Refer to MSDS for suggestions and/or requirements.

Wherever possible, we use only naturally-based, renewable

ingredients, such as grains, corn oil, palm kernel oil,



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



BIODEGRADABILITY

(Decomposition of organic substances into carbon dioxide, water, and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



coconut oil, sugar cane juice & glucose.

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



CERTIFIED

Environmental Choice Program CCD-147B-Hard Floor Care Products



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.











SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Clean Cut Floor Stripper Concentrated (Ready-to-use)

Product Code: ES90C

Product Use: Floor Stripper

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

HMIS Hazard Rating

HEALTH

1 0 - Insignificant

FLAMMABILITY
0 1 - Slight
2 - Moderate
3 - High
PROTECTION

B 4 - Extreme



Emergency Phone: CANUTEC (613) 996-6666

	SECT	TION II – INFO	DRMATION ON INGRE	CDIENTS	
Ingredients	CAS#	WT%	ACGIH-TLV	<u>LD₅₀</u>	LC ₅₀
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA
2-Phenoxyethanol	122-99-6	1-5	Not applicable	1,260 mg/kg (Oral, Rat)	NA
Monoethanolamine	141-43-5	1-5	3 ppm TWA	1,720 mg/kg (Oral, Rat)	NA
Phenyl ethyl alcohol	60-12-8	0.1-1	Not applicable	1,790 mg/kg (Oral, Rat)	NA
Dipropylene glycol n-butyl ether	29911-28-2	0.1-1	Not applicable	1,500 mg/kg (Oral, Rat)	NA
Alcohol ethoxylate	68439-46-3	0.1-1	Not applicable	>2,000 mg/kg (Oral, Rat)	NA
FD&C Yellow #5	1934-21-0	0-0.1	Not applicable	12,750 mg/kg (Oral, Mouse)	NA

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause severe irritation upon direct contact.

Skin Contact: May cause mild irritation.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV - FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. **Skin Contact:** Flush with water for 15 minutes. Seek medical attention if irritation develops. **Inhalation:** Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited – ES90CRTU

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Ammonia, oxides of carbon and nitrogen. Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. Rinse area thoroughly with water. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII – HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN, Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. **Engineering Controls:** General ventilation normally adequate.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Yellow; bland. Physical State: Liquid **Boiling Point (°C):** 98 Freezing Point (°C): NE % Volatile (Wt%): >90 VOC (g/L): 13 Specific Gravity (H₂O=1): 1.00 pH (as supplied): 10.00 **Evaporation Rate (Water=1):** Similar Viscosity: Water-thin. Coefficient of Water/Oil Distribution: NE Solubility in Water: Soluble **Odor Threshold: NE**

Vapor Pressure: NA Vapor Density: NA

SECTION X - STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: May react with Strong oxidizing agents, strong acids and soft metals.

Conditions of reactivity: NE

Hazardous Decomposition Products: Ammonia, oxides of carbon and nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀: Not established for this product. LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII - ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are either biodegradable or readily biodegradable as measured by OECD Test Method 301D.

Aquatic Acute Toxicity: Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing.

T.D.G. Classification: Not regulated. **D.O.T. Classification:** Not regulated.

SECTION XV – REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA - Section 102 (Reportable Quantity) 40 CFR 302 - None of these ingredients are

RCRA 40CFR 261 (SUBPART D) - None of these ingredients are listed.

CLEAN WATER ACT - Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT - Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) -None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Page 2 of 2 Enviro-Solutions Limited – ES90CRTU



H₂O₂ CARPET STAIN & SPOT REMOVER (Ready To Use)

Removes the toughest of spots and odors, such as:

- coffee and tea
- pet stains (urine, feces, vomit)
- red wine
- black marker
- grass
- fruit juices (grape juice)
- soft drinks
- blood
- mustard, ketchup
- oils
- general soils

For oil and grease spots, use ES 88.

- 1) Always test for color fastness in a hidden/inconspicuous area prior to the treatment of the stain.
- Remove all loose solid soils from the area to be cleaned by brushing/scraping/vacuuming. If it is a liquid stain, blot off the excess with a white cotton cloth or wet vac/extract.
- 3) Spray ES 92 generously (allow the carpet to get moist) about 12 inches from the stained area. Do not rub/scrub/blot the area.
- **4)** For deep pile carpets, work ES 92 into the pile lightly with a clean rag or brush.
- 5) Let sit for 5 to 10 minutes.
- 6) Using a dull, blunt tool (tablespoon, spatula, etc.) work the stain from the outside towards the middle.
- Blot the area with a clean, white cotton cloth.
 Do not scrub.
- 8) Rinse the area with clean water and blot up using a clean white cotton cloth or wet vac/extractor (works best).
- Re-apply ES 92 lightly and walk away. If possible, keep foot traffic off the stain until dry.
- **10)** After a few days, check the stain. Re-treatment may be necessary in cases of severe staining.

SHELF LIFE:

Nine to twelve months from production date without a significant reduction in efficacy. Closing the sprayer when not in use will prolong shelf life.

SIZES:

946 ml (1.0 U.S. quart)



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



BIODEGRADABILITY

(Decomposition of organic substances into carbon dioxide, water and other harmless substances.) Rapid biodegradation reduces impact on the environment and food chain. All organic cleaning ingredients in these formulas are readily biodegradable per OECD Test 301D.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



NATURALLY DERIVED RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



VERY LOW TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



AQUATIC TOXICITY

Product exceeds recognized acute toxicity standards for fish, invertebrate and algae at use dilution.



SEAL OF APPROVAL

Carpet & Rug Institute



Certified Carpet and Upholstery Care Products CCD-148



Bio-Renewable - U.S.D.A. Bio-Preferred Program









SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: H₂O₂ Carpet Stain & Spot Remover (Ready-To-Use)

Product Code: ES92

Product Use: Carpet Stain & Spot Remover

Manufacturer/Supplier: Enviro-Solutions Limited

Address: 2060 Fisher Drive

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

HMIS Hazard Rating

HEALTH

1 0 - Insignificant

1 - Slight
2 - Moderate
3 - High
PROTECTION

B 4 - Extreme



Emergency Phone: CANUTEC (613) 996-6666

SECTION II – INFORMATION ON INGREDIENTS					
Ingredients	CAS#	WT%	ACGIH-TLV	<u>LD₅₀</u>	<u>LC₅₀</u>
Water	7732-18-5	60-100	Not applicable	90,000 mg/kg (Oral, Rat)	NA
Surfactant blend	Mixture	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA
Hydrogen peroxide	7722-84-1	0.5-5	1 ppm	1,232 mg/kg (Oral, Rat)	NA

SECTION III - HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause irritation. **Skin Contact:** May cause irritation.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV - FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops. Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solutions Limited – ES92

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None **UEL:** None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. **Explosion Data – Sensitivity to Static Discharge:** None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. Wash surface with plenty of water. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials. Store away from heat.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required under normal operating conditions, if good ventilation is maintained.

Other protective equipment: As required by employer code. **Engineering Controls:** General ventilation normally adequate.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear colorless; Mild. Physical State: Liquid **Boiling Point (°C):** 100 Freezing Point (°C): NE **% Volatile (Wt%):** >95 pH (use-solution): 5.70 Specific Gravity ($H_2O=1$): 1.01 **VOC** (**g/L**): 0 **Evaporation Rate (Water=1):** Similar Viscosity: Water thin.

Coefficient of Water/Oil Distribution: NE Solubility in Water: Soluble. Odor Threshold: NE Vapor Pressure: NA Vapor Density: NA

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable.

Incompatibility Materials: Aluminum, aluminum alloys, strong alkali and strong reducing agents.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION XI - TOXICOLOGICAL INFORMATION

LD₅₀ (Calculated): >5,000 mg/kg (Oral, Rat). LC₅₀: Not applicable. This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII – ECOLOGICAL INFORMATION

Biodegradability: All organic ingredients of this formula have been tested by an independent laboratory and all are readily biodegradable as measured by OECD Test Method 301D. **Aquatic Acute Toxicity:** LC₅₀ >100 mg/L (Calculated, 96 hr, Fish)

(use-solution)

SECTION XIII - DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. **T.D.G. Classification:** Not regulated under T.D.G. **D.O.T. Classification:** Not regulated under D.O.T.

SECTION XV - REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA - Section 102 (Reportable Quantity) 40 CFR 302 - None of these ingredients are listed.

RCRA 40CFR 261 (SUBPART D) - None of these ingredients are listed.

CLEAN WATER ACT - Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT - Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) -None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: September 30, 2011

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Page 2 of 2 Enviro-Solutions Limited – ES92



RESTORATION WASH, GLOSS, TRACTION & BUFF

A new technology floor restoration compound, specifically formulated to clean, polish and improve slip resistance on any floor in one simple step.

USAGE DIRECTIONS

Lightly Soiled Floors

- 1) Dust mop floor.
- 2) Dilute 45-60 mL of #95 to 3.78 L water (1 1/2 oz. 2 oz. of #95 per gallon of water).
- 3) Damp mop, for large areas use an auto scrubber.
- 4) Let dry.

Mop Restoration and Cleaning Applications

- 1) Dust mop floor.
- 2) Dilute 90-120 mL (3-4 oz.) of #95 to 3.78 L (1 US gallon) of water.
- 3) Using a clean mop, apply solution to the floor in the same manner as damp mopping.
- 4) Allow to sit for 3-5 minutes, then pick up the solution.
- 5) Allow to dry, then burnish with a natural hair burnishing pad.

Spray Buff Restoration

- 1) Dust mop floor.
- 2) Dilute 360 mL (12 oz.) of #95 to 3.78 L (1 US gallon) of water.
- 3) Liberally apply ahead of buffer and spray buff to a high gloss.

Auto Scrubber Restoration

- 1) Dilute 90-120 mL (3-4 oz.) of #95 to 3.78 L (1 US gallon) of water.
- 2) Scrub with a red pad on a double pass procedure. Scrub only on the first pass (do not pick-up) and then on the second pass, pick-up only, do not scrub. The longer the solution sits between passes the better the results.
- 3) Allow to dry.
- 4) Burnish with floor machine and burnishing pad.

BENEFITS

VERSATILE - cleans, polishes, restores and improves slip resistance

ECONOMICAL - saves money and reduces the need for stripping

SAFE - compatible with most floors

PROTECTS - resists dirt, stains, scuffs and scratches

SIZES:

3.78 L (1.0 U.S. gallon)

CAUTION: Keep from freezing



PACKAGING

Wherever possible, bottles and pails made from recycled plastic (10 - 25%). Can be recycled where facilities exist. Boxes made from recycled cardboard (94 - 100%).



NATURAL RENEWABLE RESOURCES

Wherever possible, we use only naturally-based, renewable ingredients, such as grains, corn oil, palm kernel oil, coconut oil, sugar cane juice & glucose.



HEALTH & SAFETY

No ingredient found on major regulatory lists. Non-flammable and non-corrosive at use dilution.



TOXICITY

Acute Oral/Dermal Product considered essentially non-toxic according to WHMIS regulations.



Floor coating and finishing material classified by Underwriters Laboratories Inc. as to slip resistance only 18RL FTM-1



Certified Hard Floor Care Products



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www.enviro-solution.com







SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Restoration **Product Code:** ES95

Product Use: Floor Cleaner & Gloss Restorer

Manufacturer/Supplier: Enviro-SolutionsTM **Address:** 2060 Fisher Drive,

Peterborough, ON K9J 8N4

Telephone: (705) 745-3070

HMIS Haza	rd Rati	ng
HEALTH	1	0 - Insignificant
FLAMMABILITY	0	1 – Slight
REACTIVITY	0	2 – Moderate
PERSONAL PROTECTION	В	3 – High 4 – Extreme



Emergency Phone: CANUTEC (613) 996-6666

	SECT	ION II – INFO	ORMATION ON INGRE	DIENTS	
Ingredients	CAS#	WT%	ACGIH-TLV	<u>LD</u> ₅₀	<u>LC</u> 50
Water	7732-18-5	40-70	Not applicable	90,000 mg/kg (Oral, Rat)	NA
Propylene glycol	57-55-6	15-40	Not applicable	18,300 mg/kg (Oral, Rat)	NA
Alcohol ethoxylated	68439-46-3	1-5	Not applicable	1,378 mg/kg (Oral, Rat)	NA
Acrylic polymer	Mixture	1-5	Not applicable	>5,000 mg/kg (Oral, Rat)	NA
Tributoxyethyl phosphate	78-51-3	1-5	Not applicable	>2,000 mg/kg (Oral, Rat)	NA
Diethylene glycol monoethyl ether	111-90-0	1-5	Not applicable	10,900 mg/kg (Oral, Rat)	NA
Dimethyl siloxanes and silicones	Mixture	< 0.5	Not applicable	ND	NA
Isothiazolinone pereservative	Mixture	< 0.5	Not applicable	3,810 mg/kg (Oral, Rat)	NA
Potassium hydroxide	1310-58-3	< 0.5	2 mg/m ³ TLV	365 mg/kg (Oral, Rat)	NA

SECTION III – HAZARDS IDENTIFICATION

Route of Entry: Eye, skin contact, inhalation, ingestion.

Effects of Acute Exposure:

Eye Contact: May cause mild to moderate irritation upon direct contact.

Skin Contact: May cause mild to moderate irritation to those with sensitive skin.

Inhalation: No hazards under normal conditions of use. Prolonged exposure may cause nose,

throat and respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Effects of Chronic Exposure: See Section 11.

SECTION IV – FIRST AID MEASURES

Eye Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation develops. Inhalation: Remove to fresh air and take deep, slow breaths. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Seek medical attention if symptoms persist. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Enviro-Solution™— ES95

Flammability: Not flammable. Flash Point: (deg C, TCC): None

LEL: None UEL: None

Auto-Ignition Temperature: None

Hazardous Combustion Products: Oxides of carbon.

Means of Extinction: Water mist (fog), dry chemical, carbon dioxide, or foam. **Special Fire Hazards:** Firefighters should wear self-contained breathing apparatus.

Explosion Data – Sensitivity to Mechanical Impact: None. Explosion Data – Sensitivity to Static Discharge: None.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. For large quantities, dispose of in accordance with local, state/provincial and federal laws.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Rubber gloves may be advisable if repeated/prolonged contact may occur or for those with sensitive skin.

Eye protection: Use safety glasses when direct contact may occur.

Respiratory protection: Not normally required if good ventilation is maintained.

Other protective equipment: As required by employer code. Engineering Controls: General ventilation normally adequate.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Clear colorless; Mild acrylic.

Boiling Point (°C): 100

Freezing Point (°C): NE

Specific Gravity (H₂O=1): 1.04

VOC (g/L): 348

Evaporation Rate (Water=1): Similar

Coefficient of Water/Oil Distribution: NE

Vapor Pressure: NA

Vapor Density: NA

Physical State: Liquid
% Volatile (Wt%): >50
pH (as supplied): 11.50
Viscosity: Water thin.
Solubility in Water: Soluble
Odor Threshold: NE

SECTION X – STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable. Incompatibility Materials: May react with acids.

Conditions of reactivity: NE

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION XI – TOXICOLOGICAL INFORMATION

LD₅₀: Not established for this product. LC₅₀: Not established for this product.

This product may cause irritation to the eyes or skin upon prolonged contact.

Conditions Aggravated by Exposure: None known.

Sensitization to Product: None known.

Carcinogenicity: No ingredients listed by IARC or NTP. Non-hazardous by WHMIS standards.

Teratogenicity, Mutagenicity, Reproductive Effects: None known.

Toxicologically Synergistic Products: None known.

SECTION XII – ECOLOGICAL INFORMATION

Biodegradability: Not established for this product. **Aquatic Acute Toxicity:** Not established for this product.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local state/provincial and federal regulations.

SECTION XIV - TRANSPORTATION

Special Shipping Information: Keep from freezing. T.D.G. Classification: Not regulated under T.D.G. D.O.T. Classification: Not regulated under D.O.T.

SECTION XV - REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class: D2B.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations Under the Hazardous Product Act).

Environmental Regulatory Lists:

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

SECTION XVI – OTHER INFORMATION

Date: March 12, 2012

Prepared by: Technical Services Group **Telephone:** (705) 745-3070

NA: Not Available NE: Not Established

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages, which may result from the use of or reliance on any information contained in this form. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400), or CSST in Montreal, Quebec (514-873-3990).

Enviro-Solution™ ES95

APPENDIX B. Forms used in Western's Quality Assurance for Caretakers

University of Western Ontario

University of Western Ontario

Customer:Building:	Date: Inspector:
Area:	Employee:
Entrance Gr	raded Score: 0 - 5
Mats	
Lobbies / Corridors/Atrium	
Floor Appearance	
Dusting	
Fixtures, Furniture	
Lunchroom/Cafeteria	
Floor Appearance	
Baseboards & Corners	
Fixtures, Furniture	
Drinking Fountains	
Furniture & Equipment	
Washrooms	
Floor Appearance	
Walls & Doors	
Sinks	
Mirrors	
Partitions	
Toilets, Urinals	
Office Areas	
Floor Appearance	
Baseboards & Corners	
Fixtures, Furniture	
Dusting	
Walls & Doors	
Glass, Metal Surfaces	
Light Fixtures/Vents	
Floor, Carpet	
Mirrors	
Sills & Frames	
Stairwells	
Sweeping	
Steps & Landings	
Rails & Walls	

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University of Western Ontario

University of Western Ontario

Customer:	Date:	
Building:	Inspector:	
Area:	Employee:	
Elevators	Graded Score: 0 - 5	
Walls & Doors		
Floor Appearance		
Elevator Tracks		
Light Fixtures		
Other		
Drinking Fountains		
Spot Cleaning		
Graffiti		
Classrooms/Exam Room		
Floor Appearance		
Fixtures, Furniture		
Walls & Doors		
Light Fixtures/Vents		
Residence Rooms/Lounges/Laundry		
Fixtures, Furniture		
Walls & Doors		
Floor Appearance		
Light Fixtures/Vents		
Shower Areas/Locker Rooms		
Fixtures, Furniture		
Dusting		
Walls & Doors		
Floor Appearance		
Light Fixtures/Vents		
Gymnasium/Studios/Fitness Training		
Dusting		
Spot Cleaning		
Floor Appearance		
Baseboards & Corners		

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University of Western Ontario

University of Western Ontario

Customer:	 Date:	
Building:	Inspector:	
Area:	Employee:	

Score	Short Description	Long Description
1	Orderly Spotlessness	Level 1 Establishes cleaning at the highest level. Floors and base moldings shine and/or are bright and clean, colors are fresh. There is no buildup in corners or along walls. All vertical and horizontal surfaces have cleaned or polished appearance and have no accumulation of dust, dirt, marls, streaks, smudges or fingerprints. Washroom and shower tile and fixtures gleam and are odor-free. Supplies are adequate. Trash containers and pencil sharpeners are empty, clean, and odor-free.
2	Orderley Tidiness	Level 2 is the base which cleaning should be maintained. Lower levels for washrooms, changing/locker rooms and similar type facilities are not acceptable. Floors and base mouldings shine and/or are bright and clean. There is no buildup in corners or along walls, but there can be up to two days worth of dirt, dust, stains or streaks. All vertical and horizontal surfaces are clean, but marks, dust, smudges and fingerprints are noticeable with close observation. Washroom and shower tile and fixtures gleam and are odor free. Supplies are adequate. Trash containers and pencil sharpeners are empty, clean and odor free.
3	Casual Inattention	This level reflects a lowering of normal expectations. Floors are swept clean, but upon close observation dust, dirt and stains as well as a build-up of dirt dust and/or floor finish in corners and along walls, can be seen. There are dull spots and/or matted carpet in walking lanes, and streaks and splashes on base mouldings. All vertical and horizontal surfaces have obvious dust, dirt, marks, smudges and fingerprints. Lamps all work and fixtures are clean. Trash containers and pencil sharpeners are empty, clean and odour free.
4	Moderate Dinginess	Level 4 relects somesignifianct problems. Area are becoming unacceptable. People beginning to accept an environement lacking normal cleanliness. Floors are swept clean, but are dull. Colours are dingy, and there is an obvious buildup of dust dirt and/or floor finsih in corners and along walls. Moulding is dull and contains streaks and splashes. All vertical and horizontal surfaces have conspicuous dust, dirt, smudges, fingerprints and marks that will be difficult to remove. Less than 5% of lamps are burned out, and fistures are dingy. Trash containers and pencil sharpeners have old trash and shavings, They are stained and marked. Trash cans smell sour.
5	Unkempt Neglect	Final and lowest level. This facility is always dirty, with cleaning accomplished at an unacceptable level. Floors and carpets are dirty and have visible wear and/or pitting.

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