Professional Aerosol Products

HD-860
HARDEX BRAKE & PARTS CLEANER 400ML

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name:	Hardex Brake & Parts Cleaner 400ml
Manufacturer's Product Code:	HD-860
Use(s):	Aerosol Spray
Manufacturer/Supplier:	Amerseal Industrial Sdn. Bhd.
Address:	No. 2A, Jalan IM 3/6, Kawasan Perindustrian IM 3, Bandar Indera Mahkota, 25200 Kuantan, Pahang Darul Makmur, Malaysia.
Telephone Number:	+609-5721063/1064/1065
Fax:	+609-5721066
Email:	info@hardexworld.com
Website:	http://www.hardexworld.com
Emergency Telephone Number:	+609-5721063 (24 hours)

SECTION II: HAZARD IDENTIFICATION

Classification of the Hazardous Chemical: Flammable aerosol, category 2
Specific target organ toxicity – repeated exposure, category 2

Label Elements:

Hazard Pictograms:

Signal Word: Warning

Hazard Statements: H223: Flammable aerosol

H373: May cause damage to organs through prolong or repeated exposure

Precautionary Statements Prevention:

P210: Keep away from heat/ sparks/ open flames/ hot surfaces-No smoking
P211: Do not spray on an open flame or other ignition source
P251: Pressurized container: Do not pierce or burn, even after use
P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray

Precautionary Statements Response:

P314: Get medical advice/ attention if you feel unwell

Precautionary Statements Storage:

P410 + P412: Protect from sunlight. Do not expose to temperature exceeding 50°C/ 122°F

Precautionary Statements Disposal:

P501: Dispose of contents/container to an approved waste disposal plant in accordance to local regulation

Other Hazards Which Do Not Result in Classification
None known.

SECTION III: COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration (%)	Classification
Alcohol derivative	67-63-0	10%-<30%	Flam. Liq., Cat. 2 Eye damage, Cat. 2 STOT SE, Cat. 3
Chlorinated hydrocarbon	127-18-4	30%-60%	Carcinogenicity, Cat. 2 Aquatic Chronic, Cat. 2
Phenol derivative	108-88-3	10%-<30%	Flam. Liq., Cat. 2 Skin irrit., Cat. 2 Reproductive toxicity, Cat. 2 STOT SE, Cat, 3 STOT RE, Cat. 2 Aspiration hazard, Cat. 1
Liquefied petroleum gas	68476-85-7	30%-60%	Flam. Gas, Cat. 1 Liquefied gas

SECTION IV: FIRST AID MEASURES

If in Eyes: Flush eyes with large volumes of fresh water, lifting upper and lower lid occasionally. Receive medical support.

If in Skin: Water affected area thoroughly with soap and water. Contaminated clothing and launder should be removed before re-use.

If Swallowed: Drink 2 glasses of water immediately. Never give anything by mouth to an unconscious person. Call physician immediately. Do not induce vomiting.

If Breathed: Remove individual to fresh air if affected. If breathing is difficult, give oxygen. Give artificial respiration if the breathing has stopped. Keep person warm and quiet. Obtain medical support.

SECTION V: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media:	Carbon dioxide Dry chemical Foam Water fog
Unsuitable extinguishing media:	Water

Special Hazards Arising from the Substance or Mixture

In case of fire the following can develop:	Oxides of carbon Danger of bursting (explosion) when heated Danger of explosion by prolonged heating Explosive vapor/air mixture

Advice for Firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed container to prevent build-up and possible auto ignition or explosion when expose to extreme heat.

SECTION VI: ACCIDENTAL RELEASE MEASURE

Personal Precautions, Protective Equipment and Emergency Procedures

Remove possible causes of ignition – do not smoke.
Ensure sufficient supply of air.
Avoid inhalation, and contact with eyes or skin.

Environmental Precautions

If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

Methods and Material for Containment and Cleaning Up
Observe all personal protective equipment recommendations described in this SDS. If spray or gas escapes, ensure sample fresh air is available. Soak up with absorbent material (e.g. universal binding agent, sand and diatomaceous earth). Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Laws and regulations may apply to releases and disposal of releases.

SECTION VII: HANDLING AND STORAGE

Precautions for Safe Handling
Ensure good ventilation.
Do not smoke while spraying.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feeding stuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Condition for Safe Storage, including any Incompatibilities
Do not store in direct sunlight or at temperature exceeding 113ºF (45°C).
Do not place near heat, spark, and open flame sources.
Store in a dry place.
Store cool.
Store in a well ventilated place.

SECTION VIII: EXPOSURE CONTROL AND PERSONAL PROTECTION

Control Parameters

Chemical Name	CAS No.	Value Type (Form of Exposure)	Control Parameters/ Permissible Concentration	Basis
Alcohol derivative	67-63-0	TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
Chlorinated hydrocarbon	127-18-4	TLV	25 ppm	ACGIH
		STEL	100 ppm	ACGIH
Phenol derivative	108-88-3	TWA	100 ppm	NIOSH
		TWA	200 ppm	OSHA
Liquefied petroleum gas	68476-85-7	TWA	1000 ppm	OSHA
		TWA	1000 ppm	NIOSH

Exposure Controls

Appropriate Engineering Controls
Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection:	Wear the following personal protective equipment – safety goggles.
Skin Protection:	Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Hand Protection:	Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Inspect and replace worn or damaged gloves. Chemical resistant gloves are recommended – nitrile.
Respiratory Protection:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Filter type – combined particulates and organic vapor type.
Hygiene Measures:	Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

Environmental Exposure Controls
No information available at present.

Note: These precautions are for room temperature handling.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Mist
Odor:	Mildly sweet
Odor threshold:	Not available
pH:	Not available
Melting point/ freezing point:	Not available
Boiling point:	Not available
Flash point:	Not available

Specific gravity:	1.1
Evaporation rate:	Slower than ether
Flammability (solid, gas):	Not available
Upper/ lower flammability or explosive limits:	Not available
Vapor pressure:	Not available
Vapor density:	Heavier than air
Relative density:	Not available
Volatile by weight:	Not determined
Volatile by volume:	Not determined
Solubility in water:	Not determined
Partition coefficient: n-octanol/ water;	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
VOC's (lbs./gal):	Not determined
VOC's (grams/liter):	Not determined

The above information is not intended for use in preparing product specifications.

SECTION X: STABILITY AND REACTIVITY

Reactivity:	Stable under normal storage conditions.
Chemical stability:	Stable with proper storage and handling.
Possibility of hazardous reactions:	No dangerous reactions are known.
Conditions to avoid:	Heating, open flames and ignition sources. Pressure increase will result in danger of bursting. Protect from sunlight and do not expose to temperatures exceeding 113°F (45°C). Do not pierce or burn, even after use.
Incompatible materials:	Avoid contact with strong oxidizing agents, strong alkalis, and strong mineral acids.
Hazardous decomposition products:	Burning can produce carbon monoxide and/or carbon dioxide and trace phosgene gas.

SECTION XI: TOXICOLOGICAL INFORMATION

Specific Target Organ Toxicity – Repeated Exposure:	May cause damage to organs through prolong or repeated exposure

SECTION XII: ECOLOGICAL INFORMATION

Ecotoxicity:	Not available
Persistence and degradability:	Not available
Bioaccumulative potential:	Not available
Mobility in soil:	Not available
Other adverse effects:	Not available

SECTION XIII: DISPOSAL INFORMATION

Disposal Methods

Waste from Residues:	Disposal of waste to be in accordance with the Environmental Quality (Scheduled Wastes) 2005 Regulations and other guidelines issuance by DOE and/local authorities.
Contaminated Packaging:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION XIV: TRANSPORTATION INFORMATION

General Statements

UN number: 1950

Transport by Road/by Rail (ADR/RID)

UN proper shipping name:	UN 1950 Aerosols
Transport hazard class(es):	2.1
Packing group:	II
Classification code:	5F
LQ (ADR 2015):	1 L
Environmental hazards:	Not applicable
Tunnel restriction code:	D

Transport by Sea (IMDG-code)

UN proper shipping name:	UN 1950 Aerosols

Transport hazard class(es):	2.1
Packing group:	II
EmS:	F-D, S-U
Environmental hazards (Marine pollutant):	Not applicable

Transport by Air (IATA)

UN proper shipping name:	UN 1950 Aerosols
Transport hazard class(es):	2.1
Packing group:	II
Environmental hazards:	Not applicable

Special Precautions for User
Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.

Transport in Bulk According to Annex II of MARPOL and the IBC Code
Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.
Comply with special provisions.

SECTION XV: REGULATORY INFORMATION

Environmental Quality (Scheduled Wastes) Regulations 2005

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

Occupational Safety and Health (Use and Standards of Exposure of Chemical Hazardous to Health) Regulations 2000

SECTION XVI: OTHER INFORMATIONS

WARRANTY
The information and data contained herein is believed to be accurate and reliable: however, it is the user's responsibility to determined suitability of use. Since the supplier cannot know all the uses or the conditions of use to which this product may be put, no warranties concerning fitness or suitability for a particular use or purpose are made. The supplier warrants only that its products will meet its specifications. There is not a warranty of merchantability or fitness for use, nor any other express or implied warranty. The user's exclusive remedy and supplier's sole liability is limited to refund of the purchase price or replacement of any product shown to be otherwise than was warranted.

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References

- Book: Protecting the Ozone Layer: Malaysia Implementing the Montreal Protocol by the United Nations Development Programmed (UNDP), Malaysia
- ICOP CLASS 2014
- GHS Classification Guidance by the Japanese Government (Sep, 2008)

Full Text of Other Abbreviations

ACGIH:	Association Advancing Occupational and Environmental Health
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible exposure limit
STEL:	Short- term exposure limit
TLV:	Threshold limit values
TWA:	Time weighted average