

Version 4.0	Revision Date 07/31/2017	Print Date 08/16/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	K00794 TM CRISP+CLEAN REFILL TMFB32PK
Material number	:	0000000001049459
Manufacturer or supplier's	deta	nils
Company	:	Zep Inc.
Address	:	1310 Seaboard Industrial Blvd., NW Atlanta, GA 30318
Telephone	:	404-352-1680

Emergency telephone numbers

For SDS Information	:	Compliance Services 1-877-428-9937
For a Medical Emergency	:	877-541-2016 Toll Free - All Calls Recorded
For a Transportation	:	CHEMTREC: 800-424-9300 - All Calls Recorded.
Emergency		In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Air Care

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas	
Colour	colourless, light yellow	
Odour	characteristic	

GHS Classification

Flammable aerosols	:	Category 2
Gases under pressure	:	Liquefied gas
Eye irritation	:	Category 2A
Skin sensitisation	:	Category 1
Reproductive toxicity	:	Category 2
Specific target organ toxicity -	:	Category 3 (Central nervous system)
single exposure		

GHS label elements

GHS label elements	
Hazard pictograms	
Signal word	: Warning

Hazard statements

: H223 Flammable aerosol. H280 Contains gas under pressure; may explode if heated. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.



Version 4.0	Revision Date 07/31/2017	Print Date 08/16/2017
	H336 May cause drowsiness or o H361 Suspected of damaging fer	
Precautionary statements	 Prevention: P201 Obtain special instructions P202 Do not handle until all safet and understood. P210 Keep away from heat/spark No smoking. P211 Do not spray on an open fla P251 Pressurized container: Do tuse. P261 Avoid breathing dust/ fume. P264 Wash skin thoroughly after P271 Use only outdoors or in a wee P272 Contaminated work clothing the workplace. P280 Wear protective gloves/ proprotection/ face protection. Response: P302 + P352 IF ON SKIN: Wash P304 + P340 + P312 IF INHALEE and keep comfortable for breathin CENTER/doctor if you feel unwel P305 + P351 + P338 IF IN EYES for several minutes. Remove conteasy to do. Continue rinsing. P308 + P313 IF exposed or concattention. P333 + P313 If skin irritation or ra advice/ attention. P363 Wash contaminated clothin Storage: P403 Store in a well-ventilated pl P410 + P412 Protect from sunlig temperatures exceeding 50 °C/ 1 Disposal: Dispose of contents/container in regulation. 	ty precautions have been read (s) open flames/hot surfaces. ame or other ignition source. not pierce or burn, even after / gas/ mist/ vapours/ spray. handling. vell-ventilated area. g should not be allowed out of otective clothing/ eye with plenty of soap and water. D: Remove person to fresh air ng. Call a POISON I. S: Rinse cautiously with water ntact lenses, if present and cerned: Get medical advice/ ash occurs: Get medical sists: Get medical advice/ ng before reuse. lace. ht. Do not expose to 122 °F.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
1,1-difluoroethane	75-37-6	>= 50 - < 70
propan-2-ol	67-63-0	>= 20 - < 30
Distillates (petroleum), hydrotreated light	64742-47-8	>= 5 - < 10
benzyl salicylate	118-58-1	>= 0.1 - < 1
hexyl salicylate	6259-76-3	>= 0.1 - < 1
2-(4-tert-butylbenzyl)propionaldehyde	80-54-6	>= 0.1 - < 1



Version 4.0

Revision Date 07/31/2017

Print Date 08/16/2017

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES			
General advice :	Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.		
If inhaled :	Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.		
In case of skin contact :	In case of contact, immediately flush skin with soap and plenty of water. If skin irritation persists, call a physician.		
In case of eye contact :	Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Rinse immediately with plenty of water for at least 15 minutes.		
If swallowed :	Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Take victim immediately to hospital.		
Most important symptoms : and effects, both acute and delayed	Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness, paralysis, and convulsions.		
	Effects are dependent on exposure (dose, concentration, contact time). Causes serious eye irritation. May cause drowsiness or dizziness. Review section 2 of SDS to see all potential hazards.		
Notes to physician :	Treat symptomatically. Symptoms may be delayed.		

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.



Version 4.0		Revision Date 07/31/2017	Print Date 08/16/2017
Hazardous combustion	:	Carbon dioxide (CO2)	
products		Carbon monoxide Smoke	
		Fluorine compounds	
		Hydrogen fluoride Fluorocarbons	
		Nitrogen oxides (NOx)	
Specific extinguishing	:	Use extinguishing measures that are	
methods		circumstances and the surrounding e	nvronment.
Further information	:	Collect contaminated fire extinguishir must not be discharged into drains.	g water separately. This
		Fire residues and contaminated fire e	0
		be disposed of in accordance with low For safety reasons in case of fire, cal	
		separately in closed containments.	
		Use a water spray to cool fully closed	l containers.
Special protective equipment	:	Wear self-contained breathing appara	atus for firefighting if
for firefighters		necessary.	

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	BEWARE: Aerosol is pressurized. Keep away from direct sun



Version 4.0	Revision Date 07/31/2017	Print Date 08/16/2017
	exposure and temperatures over 50 or throw into fire even after use. Do red-hot objects. No smoking. Observe label precautions. Keep in a dry, cool and well-ventilat Electrical installations / working ma the technological safety standards.	not spray on flames or ed place.
Materials to avoid	: Keep away from oxidizing agents a materials.	nd strongly acid or alkaline

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
1,1-difluoroethane	75-37-6	TWA	1,000 ppm	US WEEL
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA P0
		STEL	500 ppm 1,225 mg/m3	OSHA P0
		PEL	400 ppm 980 mg/m3	CAL PEL
		STEL	500 ppm 1,225 mg/m3	CAL PEL
Distillates (petroleum), hydrotreated light	64742-47-8	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		PEL (particulate)	5 mg/m3	CAL PEL

Components with workplace control parameters

Biological occupational exposure limits

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
PROPAN-2-OL	67-63-0	Acetone	Urine	End of	40 mg/l	ACGIH BEI
				shift at		
				end of		
				workwee		



Version 4.0	Revision Date 07/31/2017	Print Date 08/16/2017
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Engineering measures	: effective ventilation in all processing	areas
Personal protective equipm	ent	
Respiratory protection	: No personal respiratory protective ex required.	quipment normally
Hand protection Remarks	: Skin should be washed after contact	
Eye protection	: Always wear eye protection when the eye contact with the product cannot	•
Skin and body protection	: No special protection is required.	
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at th	e end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a liquefied g	jas
Colour	: colourless, light yellow	
Odour	: characteristic	
Odour Threshold	: No data available	
рН	: Not applicable	
Melting point/freezing point	: No data available	
Boiling point	: No data available	
Flash point	: Not applicable	
Evaporation rate	: No data available	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapour pressure	: No data available	
Relative vapour density	: No data available	
Density	: No data available	
Solubility(ies)		
Water solubility	: partly soluble	
Partition coefficient: n- octanol/water	: No data available	
Auto-ignition temperature	: not determined	
Thermal decomposition	: No data available	



Version 4.0	Revision Date 07/31/2017	Print Date 08/16/2017

Viscosity		
Viscosity, kinematic	:	No data available
Heat of combustion	:	21.65 kJ/g

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Stable	
Chemical stability	Stable under normal conditions.	
Possibility of hazardous reactions	Vapours may form explosive mixture with air. No decomposition if stored and applied as direct	cted.
Conditions to avoid	Heat, flames and sparks. Extremes of temperature and direct sunlight.	
Incompatible materials	Acids Oxidizing agents	
Hazardous decomposition products	Carbon monoxide, carbon dioxide and unburne hydrocarbons (smoke).	d

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness, paralysis, and convulsions.
	Effects are dependent on exposure (dose, concentration, contact time).
Carcinogenicity:	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.



Version 4.0	Revision Date 07/31/2017	Print Date 08/16/2017
NTP	No component of this product present equal to 0.1% is identified as a known by NTP.	
Acute toxicity		
Product:		
Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg Method: Calculation method	ŋ/kg
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg Method: Calculation method	g/kg
Components:		
1,1-difluoroethane: Acute inhalation toxicity	: LC50 Mouse: 977,000 mg/l Exposure time: 2 h	
propan-2-ol: Acute oral toxicity	: LD50 Oral Rat: 4,396 mg/kg Method: Calculation method	
Distillates (petroleum), hyd Acute oral toxicity	rotreated light: : LD50 Rat: > 5,000 mg/kg	
Acute inhalation toxicity	: LC50 Rat: > 4.6 mg/l Exposure time: 6 h	
Acute dermal toxicity	: LD50 Rat: > 2,000 mg/kg	
benzyl salicylate: Acute oral toxicity	: LD50 Oral Rat: 2,227 mg/kg	
Skin corrosion/irritation		
Product:		
Remarks: May cause skin irr	itation and/or dermatitis.	
Serious eye damage/eye irritati	on	
Product:		
Remarks: Severe eye irritation	n	
Respiratory or skin sensitisation	n	
Product:		
Remarks: Causes sensitisati	on.	
Germ cell mutagenicity		
No data available		



Version 4.0

Revision Date 07/31/2017

Print Date 08/16/2017

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Components:

Distillates (petroleum), hydrotreated light: Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	
No data available	
Persistence and degradability	
No data available Bioaccumulative potential	
Product:	
Partition coefficient: n- : octanol/water	Remarks: No data available
Mobility in soil	
No data available	
Other adverse effects	
No data available <u>Product:</u>	
Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances



Revision Date 07/31/2017	Print Date 08/16/2017
This product neither contains, nor w with a Class I or Class II ODS as de Clean Air Act Section 602 (40 CFR + B).	fined by the U.S.
No data available	
eated light :	
No data available	
	This product neither contains, nor w with a Class I or Class II ODS as de Clean Air Act Section 602 (40 CFR + B). No data available eated light :

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.
Contaminated packaging	 Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.



Version 4.0

Revision Date 07/31/2017

Print Date 08/16/2017

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
diethyl phthalate	84-66-2	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazaro	Is : Fire Hazard Sudden Release of Pressure Hazard Acute Health Hazard Chronic Health Hazard	
SARA 302	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.	
SARA 313	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.	
California Prop 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	
The components of th	is product are reported in the following inventories:	
TSCA DSL	On TSCA Inventory This product contains one or more components that are listed on the Canadian NDSL. All other components are on the Canadian DSL.	
For information on the manufacturer's regulate	country notification status for other regions please contact the ry group.	

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

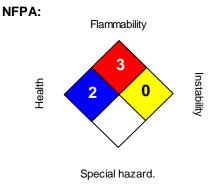


Versio	n 1 0
100	1 4.0

Revision Date 07/31/2017

Print Date 08/16/2017





HMIS III:

HEALTH	2*
FLAMMABILITY	3
PHYSICAL HAZARD	2

0 = not significant, 1 =Slight,

OSHA - GHS Label Information:

Hazard pictograms	
Signal word	: Warning:
Hazard statements	 Flammable aerosol. Contains gas under pressure; may explode if heated. May cause an allergic skin reaction. Causes serious eye irritation. May cause drow siness or dizziness. Suspected of damaging fertility or the unborn child.
Precautionary statements	
	 Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep aw ay from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a w ell-ventilated area. Contaminated w ork clothing should not be allow ed out of the w orkplace. Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: IF ON SKIN: Wash with plenty of soap and w ater. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unw ell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Wash contaminated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Disposal: Dispose of contents/container in accordance with local regulation.

Version:	4.0
Revision Date:	07/31/2017
Print Date:	08/16/2017

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

^{2 =} Moderate, 3 = High 4 = Extreme, * = Chronic



Version 4.0

Revision Date 07/31/2017

Print Date 08/16/2017

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®,Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®,Rexodan®, Mykal™, and a number of private labeled brands.