MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number	1000018923
Material name	**#1520 SDL Silicone Dry Lubricant 3033**
Company information	Enviroway Detergent Man. Inc 2241 Hanselman Avenue Unit 9 Saskatoon, SK S7L 6A7 Canada
Emergency telephone US	1-866-836-8855
Emergency telephone outside US	1-952-852-4646
Version #	01
Expiry Date	26-Oct-2018
Product use	Lubricant

2. Hazards Identification

Emergency overview DANGER

Flammable gas. CONTENTS UNDER PRESSURE.
Aerosol. Pressurized container may explode when exposed to heat or flame. Will be easily ignited by heat, spark or flames.

Potential health effects

Routes of exposure	Inhalation.
Eyes	Health injuries are not known or expected under normal use.
Skin	Health injuries are not known or expected under normal use.
Inhalation	Intentional misuse by concentrating and inhaling the product can be harmful or fatal.
Ingestion	Exposure by ingestion of an aerosol is unlikely.
Signs and symptoms	Direct contact with eyes may cause temporary irritation.
Potential environmental effects	May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Isobutane	75-28-5	30 - 60
Naphtha, Petroleum, Light Alkylate	64741-66-8	30 - 60
Propane	74-98-6	5 - 10
Other components below reportable levels		1 - 5

4. First Aid Measures

First aid procedures

Inhalation	If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Notes to physician	Treat symptomatically.
General advice	If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties Flammable by WHMIS criteria. Heat may cause the containers to explode. Ruptured cylinders may rocket.

Extinguishing media

Suitable extinguishing media	Water spray.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection.
Fire fighting equipment/instructions	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not direct water at source of leak or safety devices as icing may occur. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.

Explosion data

Sensitivity to static discharge	Not available.
Sensitivity to mechanical impact	Not available.
Hazardous combustion products	Not available.

6. Accidental Release Measures

Personal precautions	Consider initial downwind evacuation for at least 500 meters (1/3 mile). Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the MSDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Stop leak if you can do so without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Isolate area until gas has dispersed. Ventilate the area. Should not be released into the environment. Clean up in accordance with all applicable regulations. Stop the flow of material, if this is without risk. For waste disposal, see section 13 of the MSDS.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Avoid release to the environment.
Storage	Level 1 Aerosol. Contents under pressure. The pressure in sealed containers can increase under the influence of heat. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Isobutane (CAS 75-28-5)	STEL	1000 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Propane (CAS 74-98-6)	TWA	1000 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Isobutane (CAS 75-28-5)	STEL	1000 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Isobutane (CAS 75-28-5)	TWA	800 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Engineering controls General ventilation normally adequate.

Personal protective equipment

Eye/face protection Not normally needed.

Skin protection Wear suitable protective clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Hand protection Not normally needed.

9. Physical & Chemical Properties

Appearance

Physical state Gas.

Form Aerosol. Compressed gas.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Vapor pressure Not available.

Vapor density Not available.

Boiling point -43.78 °F (-42.1 °C) estimated

Melting point/Freezing point Not available.

Solubility (water) Not available.

Specific gravity 0.29 estimated

Relative density Not available.

Flash point -155.2 °F (-104.0 °C) Propellant estimated

Flammability limits in air, upper, % by volume 6.2 % estimated

Flammability limits in air, lower, % by volume	0.9 % estimated
Auto-ignition temperature	743 °F (395 °C) estimated
Evaporation rate	Not available.
Percent volatile	50 % estimated
Partition coefficient (n-octanol/water)	Not available.
Other data	
Flammability (solid, gas)	Flammable gas.
Heat of combustion (NFPA 30B)	22.31 kJ/g estimated

10. Chemical Stability & Reactivity Information

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Risk of explosion.
Conditions to avoid	Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Nitrates. Fluorine. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Isobutane (CAS 75-28-5)		
Acute		
Inhalation		
LC50	Mouse	1237 mg/l, 120 Minutes
		52 %, 120 Minutes
	Rat	1355 mg/l
Naphtha, Petroleum, Light Alkylate (CAS 64741-66-8)		
Acute		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation		
LC50	Rat	> 5000 mg/m3, 4 Hours
		> 4980 mg/m3
		> 4980 mg/m3, 4 Hours
		> 4.96 mg/l, 4 Hours
Oral		
LD50	Rat	4820 mg/kg
Propane (CAS 74-98-6)		
Acute		
Inhalation		
LC50	Mouse	1237 mg/l, 120 Minutes
		52 %, 120 Minutes
	Rat	1355 mg/l
		658 mg/l/4h

Acute effects

Sensitization	Not classified.

Chronic effects	Not expected to be hazardous by WHMIS criteria.
Carcinogenicity	Not available.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/irritation	Direct contact with eyes may cause temporary irritation.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive effects	This product is not expected to cause reproductive or developmental effects.
Teratogenicity	Not available.
Symptoms and target organs	Direct contact with eyes may cause temporary irritation.
Synergistic materials	Not available.

12. Ecological Information

Ecotoxicological data

Components		Species	Test Results
Naphtha, Petroleum, Light Alkylate (CAS 64741-66-8)			
Aquatic			
Algae	IC50	Algae	30000 mg/L, 72 Hours

Ecotoxicity	Contains a substance which causes risk of hazardous effects to the environment.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Aquatic toxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulation / accumulation	
Partition coefficient	
Isobutane	2.76
Propane	2.36
Mobility in environmental media	No data available for this product.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport Information

TDG

UN number	UN1950
UN proper shipping name	AEROSOLS, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	D
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable

Transport hazard class(es)

Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	10L
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	F-D, S-U
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

IATA; IMDG; TDG

15. Regulatory Information

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status Controlled

WHMIS classification A - Compressed Gas
B1 - Flammable Gases

WHMIS labeling

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Recommended use Use in accordance with supplier's recommendations.

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Prepared by Not available.

Revision information Product and Company Identification: Alternate Trade Names