



# Material Safety Data Sheet

Revision Date 03-Feb-2011

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product code 19904  
Product name Dri-Graph  
Recommended Use Lubricant

Supplier Lawson Products, Inc.  
1666 East Touhy Avenue  
Des Plaines, IL 60018  
(847)-827-9666

Emergency telephone number (888) 426-4851

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Extremely flammable. Contents under pressure. May cause eye/skin irritation. May cause irritation of respiratory tract.

### Aggravated Medical Conditions

None Known

### Principal Routes of Exposure

Eyes. Skin. Inhalation.

### Potential health effects

- Eyes** Exposure to vapors may cause the following effects: Irritation. Reddening. Itching. Burning sensation.
- Skin** Repeated or prolonged exposure may cause: Skin Irritation. Redness. Itching. Burning sensation.
- Inhalation** Repeated or prolonged exposure may cause the following effects. Upper respiratory tract irritation. Central nervous system depression. Headaches. Dizziness. Nausea. Loss of coordination. Extreme overexposure may cause. Cardiac abnormalities. Liver damage. Reproductive system damage. Possible unconsciousness. Death. Misuse by deliberately concentrating vapors and inhaling contents can be harmful or fatal.
- Ingestion** May be harmful if swallowed.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
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Propane	74-98-6	10-30
Butane	106-97-8	10-30
Heptanes	142-82-5	30-60
Toluene	108-88-3	0.5-1.5
Isopropyl alcohol	67-63-0	10-30
Graphite	7782-42-5	0.5-1.5

## 4. FIRST AID MEASURES

- Eye contact** Flush with plenty of water for at least 15 minutes. Seek medical attention.
- Skin contact** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
- Ingestion** Do not induce vomiting. Seek medical attention immediately.
- Inhalation** Remove to fresh air. Restore breathing. Keep warm and quiet.

## 5. FIRE FIGHTING MEASURES

Flash point °C < -17.78  
Flash point °F < 0  
Method Tag Closed Cup

Autoignition temperature °C No data available  
Autoignition temperature °F No data available

### Flammability Limits (% in Air)

Upper 12.7  
Lower 1.0

### Specific Information for Aerosol Products

Flame extension 26"  
Flashback Yes

### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Foam.

### Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Fire and Explosion Hazards**

Containers may vent or burst under extreme or prolonged fire conditions. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

**Sensitivity to shock**

No information available.

**Sensitivity to static discharge**

Yes. Take precautionary measures against static discharges.

**6. ACCIDENTAL RELEASE MEASURES****Methods for cleaning up**

Eliminate all sources of ignition. Ventilate area to maintain exposure below permissible exposure limits. Soak up with inert absorbent material. Dispose of absorbent in accordance with local, state and federal regulations.

**7. HANDLING AND STORAGE****Handling**

Keep away from open flames, hot surfaces and sources of ignition. Vapors may accumulate readily and may ignite explosively. Turn off other sources of ignition prior to use and until all vapors have dissipated. Ensure adequate ventilation. Do not smoke. Check to make sure that all equipment is properly grounded and installed to satisfy electrical classification requirements. Thoroughly wash hands and exposed skin after handling. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Contents under pressure. Do not puncture or incinerate. Do not take internally. Keep out of reach of children.

**Storage**

Store in temperatures below 120 degrees F.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Heptanes	2000 mg/m <sup>3</sup> 500 ppm	-	400 ppm	500 ppm
Isopropyl alcohol	400 ppm 980 mg/m <sup>3</sup>	-	200 ppm	400 ppm
Propane	1000 ppm 1800 mg/m <sup>3</sup>	-	1000 ppm	-
Butane	800 ppm	-	1000 ppm	-
Toluene	200 ppm	300 ppm	20 ppm	-
Graphite	-	-	2 mg/m <sup>3</sup> all forms except graphite fibers	-

**Ventilation and Environmental Controls**

Use enough ventilation, local exhaust at the work area, general, or both, to keep below the TLV's in the worker's breathing zone and the general area. Use in a well ventilated area.

**Hygiene measures**

Wash hands after handling the product. Avoid contact with skin, eyes and clothing.

**Other precautions**

Avoid breathing vapors or mists.

**Respiratory protection**

If the exposure limits are exceeded, a NIOSH/MSHA approved respirator is recommended. Wear a NIOSH approved organic vapor/particulate respirator.

**Hand Protection**

Gloves are not required in normal use. The following gloves are recommended for prolonged or repeated contact: . Chemical resistant gloves.

**Eye protection**

Wear safety glasses with side shields.

**Skin and body protection**

None necessary under normal conditions

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form</b>	Aerosol
<b>Color</b>	Colorless
<b>Odor</b>	Solvent
<b>Odor Threshold</b>	No information available
<b>pH</b>	Not Applicable
<b>Specific Gravity</b>	0.66
<b>Vapor pressure</b>	No data available
<b>Density</b>	5.50 lb/gal; 658 g/l
<b>Vapor density</b>	>Air
<b>Evaporation Rate</b>	>1 (Ether =1)
<b>Water solubility</b>	No data available
<b>VOC Content</b>	98.80%
<b>Partition Coefficient (n-octanol/water)</b>	No data available
<b>Boiling point/range °C</b>	< -18 - 114
<b>Boiling point/range °F</b>	< -0 - 238
<b>Melting point/range °C</b>	No data available
<b>Melting point/range °F</b>	No data available
<b>Flash point °C</b>	< -17.78
<b>Flash point °F</b>	< 0

**10. STABILITY AND REACTIVITY****Stability**

Stable.

**Conditions to avoid**

None known.

**Incompatibility**

None known.

**Hazardous Decomposition Products**

Carbon dioxide. Carbon monoxide.

**Polymerization**

Will not occur.

**11. TOXICOLOGICAL INFORMATION****Component Information**

Chemical Name	LD50 (oral, rat)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat)
Heptanes 142-82-5	-	3000 mg/kg	103 g/m <sup>3</sup>
Isopropyl alcohol 67-63-0	4396 mg/kg	12800 mg/kg 12870 mg/kg	72.6 mg/L
Propane 74-98-6	-	-	658 mg/L
Butane 106-97-8	-	-	658 mg/L
Toluene 108-88-3	636 mg/kg	12124 mg/kg 8390 mg/kg	12.5 mg/L 26700 ppm
Graphite 7782-42-5	-	-	-

**Synergistic Products** None known**Potential health effects****Sensitization** None known**Chronic toxicity** See Section 2 .**Mutagenic effects** None known**Teratogenic effects** None known**Reproductive toxicity** None known**Target Organ Effects** May cause damage to lungs. May cause damage to kidneys. May cause damage to liver. Reports have associated prolonged overexposure to solvents with permanent brain and nervous system damage.**Carcinogenic effects** See table below

Chemical Name	ACGIH OEL - Carcinogens	IARC	NTP - Known Carcinogens	NTP - Suspected Human Carcinogens	OSHA RTK Carcinogens
Heptanes	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Isopropyl alcohol	Listed	Not Listed	Not Listed	Not Listed	Not Listed
Propane	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Butane	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Toluene	Listed	Not Listed	Not Listed	Not Listed	Not Listed
Graphite	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

**12. ECOLOGICAL INFORMATION****Heptanes****Water Flea Data***Daphnia magna* hEC50 24 (>10 mg/L)**Isopropyl alcohol****Microtox Data***Photobacterium phosphoreum* EC50=35390 mg/L (5 min)**Water Flea Data***Daphnia magna* hEC50 48 (13299 mg/L)**Toluene****Microtox Data***Photobacterium phosphoreum* EC50=19.7 mg/L (30 min)**Water Flea Data***water flea* hEC50 48 (11.3 mg/L)*water flea* hEC50 48 (310 mg/L)*Daphnia magna* hEC50 48 (11.3 mg/L)*water flea* hEC50 48 (11.3 mg/L)**Aquatic toxicity** Do not let product enter drains Harmful to aquatic organisms**13. DISPOSAL CONSIDERATIONS****Disposal Information**

As supplied, this product is a RCRA Hazardous Waste . Waste must be tested for ignitability to determine EPA hazardous waste numbers. Do not puncture or incinerate. Depressurize before disposal. Discard container or liner in accordance with federal, state, and local regulations.

**14. TRANSPORTATION INFORMATION****DOT**

Consumer commodity, ORM-D

**TDG**

Consumer commodity, ORM-D

**15. REGULATORY INFORMATION****US EPA SARA 313**

Chemical Name	US EPA SARA 313 Emission Reporting
Isopropyl alcohol	Listed
Toluene	Listed

**State Regulations**

Chemical Name	New Jersey - RTK	Pennsylvania - RTK	California Prop. 65
Heptanes	Listed	Listed	Not Listed
Isopropyl alcohol	Listed	Listed	Not Listed
Propane	Listed	Listed	Not Listed
Butane	Listed	Listed	Not Listed
Toluene	Listed	Listed	Developmental
Graphite	Not Listed	Listed	Not Listed

WARNING: This product contains a chemical(s) known to the state of California to cause cancer and birth defects or other reproductive harm

**International Inventories**

Chemical Name	EINECS	DSL	NDSL	TSCA
Heptanes	X	X	-	X
Isopropyl alcohol	X	X	-	X
Propane	X	X	-	X
Butane	X	X	-	X
Toluene	X	X	-	X
Graphite	X	X	-	X

**CPR**

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

**16. OTHER INFORMATION****HMIS**

Health - 2  
Flammability - 4  
Physical Hazard - 0

**Prepared By**

V. Shargorodsky, Regulatory Affairs  
Engineer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.