



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 715
Product name **White Lithium Grease Lubricating Spray**
Effective date 13-Nov-2007
Company information Claire Manufacturing
500 Vista Ave.
Addison, IL 60101 United States
Company phone General Assistance 630-543-7600
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Supersedes date 14-Aug-2007

2. Hazards Identification

Emergency overview EXTREMELY FLAMMABLE
CONTENTS UNDER PRESSURE.
Aerosol. Pressurized container may explode when exposed to heat or flame.

Irritating to skin. Irritating to eyes. Irritating to respiratory system. Prolonged exposure may cause chronic effects.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Inhalation. Skin contact.

Eyes Causes eye irritation.

Skin Irritating to skin.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause delayed lung damage.

Target organs Central nervous system. Respiratory system.

Chronic effects May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage.

Signs and symptoms Discomfort in the chest. Narcosis.

3. Composition / Information on Ingredients

Components	CAS #	Percent
n-Hexane	110-54-3	20 - 30
Propane	74-98-6	15 - 20
Methylcyclopentane	96-37-7	5 - 8
Cyclopentane	287-92-3	3 - 5
Non-hazardous and other components below reportable levels		40 - 60

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops or persists.

Skin contact Wash off immediately with plenty of water. Remove and isolate contaminated clothing and shoes. If skin irritation persists, call a physician.

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Ingestion

Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to physician

Symptoms may be delayed.

General advice

Immediate medical attention is required.

5. Fire Fighting Measures

Flammable properties

Containers may explode when heated. Vapor or gas may spread to distant ignition sources and flash back.

Extinguishing media**Suitable extinguishing media**

Water fog. Foam. Dry chemical. Carbon dioxide (CO₂). Halons.

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**

Fire may produce irritating, corrosive and/or toxic gases.

Protective equipment and precautions for firefighters

In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Specific hazards

Fire may produce irritating, corrosive and/or toxic gases.

6. Accidental Release Measures

Personal precautions

Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable.

Methods for cleaning up

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling

Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not breathe gas/fumes/vapor/spray. Avoid contact with skin. Avoid contact with eyes. Wear personal protective equipment. Avoid prolonged exposure.

Storage

Level 3 Aerosol.

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Avoid exposure to long periods of sunlight. Keep in an area equipped with sprinklers. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Exposure limits**ACGIH****Components****CAS #****TWA****STEL****Ceiling**

n-Hexane

110-54-3

50 ppm

1000 ppm

Not established

Propane

74-98-6

1000 ppm

Not established

Not established

Cyclopentane

287-92-3

600 ppm

Not established

Not established

OSHA**Components****CAS #****TWA****STEL****Ceiling**

n-Hexane

110-54-3

500 ppm

Not established

Not established

Propane

74-98-6

1000 ppm

Not established

Not established

Engineering controls	Ensure adequate ventilation, especially in confined areas.
Personal protective equipment	
Eye / face protection	Wear chemical goggles.
Skin protection	Wear appropriate chemical resistant clothing. Protective gloves.
Respiratory protection	Wear positive pressure self-contained breathing apparatus (SCBA).
General hygiene considerations	When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Color	White.
Odor	Solvent.
Physical state	Liquid.
Form	Aerosol.
Flammability (HOC)	31.26 kJ/g estimated
Flash back	Yes
Pressure	35 - 45 psig @ 70F
Solubility	Partially
Flash point	-156 °F (-104.4 °C) estimated
Boiling point	231.8 °F (111.1 °C) estimated
Specific gravity	0.6848 estimated
pH	Not applicable

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition. Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Isocyanates.
Hazardous decomposition products	Irritants. Toxic gas. May include oxides of oxides of carbon.

11. Toxicological Information

Acute effects	Acute LD50: 6801 mg/kg estimated, Rat, Oral Acute LD50: 4398 mg/kg estimated, Rat, Dermal Acute LC50: 7 mg/l/4h estimated, Rat, Inhalation
Sensitization	Not expected to be hazardous by OSHA criteria.
Local effects	Irritating to eyes. Irritating to skin. Irritating to respiratory system.
Chronic effects	Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.
Neurological effects	Hazardous by OSHA criteria.
Mutagenicity	Not expected to be hazardous by OSHA criteria.
Reproductive effects	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicity	LC50 14.94 mg/L estimated, Fish, 96.00 Hours, EC50 806 mg/L estimated, Daphnia, 48.00 Hours, IC50 62664 mg/L estimated, Algae, 72.00 Hours, Components of this product have been identified as having potential environmental concerns.
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13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
Disposal instructions	Contents under pressure. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Basic shipping requirements:

Proper shipping name	AEROSOLS, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Item	5F
Labels required	2.1
Transport Category	2



IATA

Basic shipping requirements:

Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY



15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

n-Hexane: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - Yes
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
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
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)

State regulations**U.S. - Pennsylvania - RTK (Right to Know) List**

Cyclopentane	287-92-3	Present
Methylcyclopentane	96-37-7	Present
n-Hexane	110-54-3	Present
Propane	74-98-6	Present

16. Other Information**HMIS® ratings**

Health: 2*
Flammability: 4
Physical hazard: 0

Prepared by

Regulatory Compliance

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.

Issue date

13-Nov-2007