



Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: 3-36® Multi-Purpose Lubricant and Corrosion Inhibitor (aerosol)

Product Number (s): 03004, 03005, 03093

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-4620
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Clear blue-green liquid, pleasant odor

DANGER

Flammable. Harmful or Fatal if Swallowed. Contents Under Pressure.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

- EYE:** Contact may cause mild irritation including stinging, watering and redness.
- SKIN:** Contact may cause redness, itching, burning and skin damage. Prolonged or repeated contact can worsen irritation and lead to dermatitis. No harmful effects from skin absorption are expected.
- INHALATION:** Expected to have a low degree of toxicity by inhalation. High concentrations of vapors may be irritating to the respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, and other central nervous system effects.
- INGESTION:** Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.
- CHRONIC EFFECTS:** None known
- TARGET ORGANS:** None known

Medical Conditions Aggravated by Exposure:

pre-existing dermatitis

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Hydrotreated light distillates	64742-47-8	65 - 75
Solvent-refined heavy paraffinic distillates	64741-88-4	15 – 25
Inhibitor blend	proprietary	5 - 15
Carbon dioxide	124-38-9	1 - 5

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: If swallowed, do NOT induce vomiting. Keep at rest. Get prompt medical attention.

Note to Physicians: This product is an aspiration hazard.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is flammable in accordance with aerosol flammability definitions (16 CFR 1500.3(c)(6)).

Flash Point:	170 F (TCC)	Upper Explosive Limit:	5.0
Autoignition Temperature:	ND	Lower Explosive Limit:	0.7

Suitable Extinguishing Media: Foam, dry chemical, carbon dioxide or water spray.

Products of Combustion: Oxides of carbon

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush

into sewers or storm drains.

Methods for Containment & Clean-up: Remove sources of ignition. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Do not use near an open flame, heat or other sources of ignition.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Hydrotreated light distillates	NE	NE	NE	NE	1200	mfr	mg/m ³
Solvent-refined heavy paraffinic distillates	5*	NE	5*	10*	NE		mg/m ³
Inhibitor blend	NE	NE	NE	NE	NE		
Carbon dioxide	5000	30000(v)	5000	30,000	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated *- oil mist							

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile or neoprene. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: Liquid

Color: Blue-green

**Product Name: 3-36® Multi-Purpose Lubricant
and Corrosion Inhibitor (Aerosol)**

**Product Number (s): 03004, 03005,
03093**

Odor: Pleasant
Specific Gravity: 0.8187
Initial Boiling Point: 380 F
Freezing Point: ND
Vapor Pressure: ND
Vapor Density: > 1 (air = 1)
Evaporation Rate: ND (butyl acetate = 1)
Solubility: negligible in water
pH: NA
Volatile Organic Compounds: wt %: 39.1 g/L: 320.1 lbs./gal: 2.67

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Temperature extremes, sources of ignition

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: Oxides of carbon, oxides of sulfur, hydrocarbons

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Hydrotreated light distillate	LD50	> 5 g/kg	Oral	Rat
Hydrotreated light distillate	LD50	> 2 g/kg	Dermal	Rabbit
Hydrotreated light distillate	LC50	> 5 mg/L/4H	Inhalation	Rat

CHRONIC EFFECTS

Carcinogenicity:

	<u>Component</u>	<u>Result</u>
OSHA:	None listed	
IARC:	None listed	
NTP:	None listed	

Other: Paraffinic distillates Product testing using IP 346 shows a DMSO PAH content of < 3% by weight.

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available

Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Disposal: The dispensed liquid product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33)
Aerosol containers should be fully emptied and depressurized before disposal. The empty container can
be recycled.

All disposal activities must comply with federal, state and local regulations. Local regulations may be more
stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Consumer Commodity, ORM-D

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: None

**Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the
National Response Center (800-424-8802) and to your Local Emergency Planning Committee.**

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	Yes
	Reactive Hazard	No
	Release of Pressure	Yes
	Acute Health Hazard	Yes
	Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting
requirements of Section 313 of Title III of the Superfund Amendments and
Reauthorization Act of 1986 and 40 CFR Part 372:
None

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

State Regulations

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: NONE

State Right to Know:

New Jersey: None
Pennsylvania: None
Massachusetts: None
Rhode Island : None

Additional Regulatory Information: None

Section 16: Other Information

NFPA: Health: 1 Flammability: 2 Reactivity: 0
HMIS: Health: 1 Flammability: 2 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
CRC #: 510C
Revision Date: 3/13/2007

Changes since last revision: MSDS reformatted in accordance with ANSI Z400.1-2004

The information contained 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. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
PMCC:	Pensky-Martens Closed Cup	g/L:	grams per Liter
PPE:	Personal Protection Equipment	lbs./gal:	pounds per gallon
TWA:	Time Weighted Average	STEL:	Short Term Exposure Limit
OSHA:	Occupational Safety and Health Administration		
ACGIH	American Conference of Governmental Industrial Hygienists		
NIOSH	National Institute of Occupational Safety & Health		



Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: Food Grade Silicone (Aerosol)

Product Number (s): 03040, 83040

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-4620
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Clear, water-white liquid with mild solvent odor

DANGER

Extremely flammable. Harmful or fatal if swallowed. Contents under pressure.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

EYE: May cause mild irritation including stinging and redness, but does not injure eye.

SKIN: Single, brief exposures may cause mild irritation. Frequent or prolonged contact may cause more severe irritation, defatting of the skin, and dermatitis.

INHALATION: High vapor concentrations are irritating to the respiratory tract and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death. May cause peripheral nervous system disorder and/or damage.

INGESTION: Low order of toxicity by ingestion. Main hazard is aspiration into the lungs during swallowing or vomiting. Small amounts aspirated into the respiratory system may cause bronchopneumonia or pulmonary adema, possible progressing to death.

CHRONIC EFFECTS: Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.

TARGET ORGANS: central nervous system, peripheral nervous system, respiratory system

Medical Conditions Aggravated by Exposure: skin and respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Hexane isomers	various	60 - 70
n-Hexane	110-54-3	4.8
Dimethylpolysiloxane	63148-62-9	2 - 5
Liquefied petroleum gas	68476-86-8	25 - 35

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: DO NOT induce vomiting. Contact a physician immediately.

Note to Physicians: Treat symptomatically. Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is extremely flammable in accordance with aerosol flammability definitions (16 CFR 1500.3(c)(6)).

Flash Point:	< 0 F (TCC)	Upper Explosive Limit:	9.0
Autoignition Temperature:	489 F	Lower Explosive Limit:	1.7

Suitable Extinguishing Media: Class B fire extinguishers, dry chemical, foam or CO2

Products of Combustion: fumes, smoke and carbon monoxide

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water fog or spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Do not spray water directly on fire; product will float and could be reignited on surface of water.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Remove all sources of ignition. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Use proper grounding and bonding procedures for transferring materials. Do not use product near any source of ignition. Do not touch container to electrical sources as container will conduct electricity. Avoid contact with eyes and skin. Avoid breathing vapors.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Hexane isomers	500(v)	1000(v)	500	1000	NE		ppm
n-Hexane	500	NE	50(s)	NE	NE		ppm
Dimethylpolysiloxane	NE	NE	NE	NE	NE		
Liquefied petroleum gas	1000	NE	1000	NE	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Engineering Controls: Area should have ventilation to provide fresh air. Use local exhaust to prevent accumulation of vapors. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations

Respiratory Protection: None required for normal work where adequate ventilation is provided. Use a NIOSH-approved cartridge respirator with an organic vapor cartridge if vapors exceed exposure limits. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile, PVC or Viton. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid

Color: clear, water-white

Odor: mild solvent

Specific Gravity: 0.6694

Initial Boiling Point: 140 F

Freezing Point: < -76 F

Vapor Pressure: 160 mmHg @ 68 F

Vapor Density: > 1 (air = 1)

Evaporation Rate: 19 (Butyl acetate = 1)

Solubility: negligible in water

pH: NA

Volatile Organic Compounds: wt %: 97 g/L: 649.9 lbs./gal: 5.4**Section 10: Stability and Reactivity**

Stability: Stable

Conditions to Avoid: sources of ignition, temperature extremes

Incompatible Materials: strong oxidizers

Hazardous Decomposition Products: oxides of carbon

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
n-hexane	LD50	28710 mg/kg	Oral	Rat
n-hexane	LD50	3000 mg/kg	Dermal	Rabbit
n-hexane	LC50	48000 ppm/4H	Inhalation	Rat

CHRONIC EFFECTS

Carcinogenicity:

	<u>Component</u>	<u>Result</u>
OSHA:	None listed	
IARC:	None listed	
NTP:	None listed	

Mutagenicity: No information available

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: n-hexane - 48 Hr EC50 water flea: 3.87 mg/L
96 Hr LC50 Lepomis macrochirus: 4.12 mg/L

Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Disposal: The dispensed liquid product is a RCRA hazardous waste for the characteristic of ignitability with a waste code of D001 (See 40 CFR Part 261.20 – 261.33).
Aerosol containers should be emptied and depressurized before disposal. Empty containers may be recycled. Any liquid product should be managed as a hazardous waste.

All disposal activities must comply with federal, state and local regulations. Local regulations may be more stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Consumer Commodity, ORM-D

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: n-hexane (5000 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories: Fire Hazard Yes
Reactive Hazard No
Release of Pressure Yes
Acute Health Hazard Yes
Chronic Health Hazard Yes

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
n-hexane (4.8%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): n-hexane

State Regulations

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: NONE

State Right to Know:

New Jersey: 75-83-2, 110-54-3, 79-29-8, 68476-86-8
Pennsylvania: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8
Massachusetts: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8
Rhode Island : 110-54-3, 68476-86-8

Additional Regulatory Information: This product is 'Not for Retail Sale' in states with consumer products VOC regulations.

Section 16: Other Information

NFPA: Health: 2 Flammability: 3 Reactivity: 0
HMIS: Health: 2 Flammability: 3 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
CRC #: 519D
Revision Date: 12/7/2006

Changes since last revision: Formula number revised

The information contained 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. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS: Chemical Abstract Service NA: Not Applicable
ppm: Parts per Million ND: Not Determined
TCC: Tag Closed Cup NE: Not Established
PMCC: Pinsky-Martens Closed Cup g/L: grams per Liter
PPE: Personal Protection Equipment lbs./gal: pounds per gallon
TWA: Time Weighted Average STEL: Short Term Exposure Limit
OSHA: Occupational Safety and Health Administration
ACGIH American Conference of Governmental Industrial Hygienists
NIOSH National Institute of Occupational Safety & Health



Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: White Lithium Grease (Aerosol)

Product Number (s): 03080, 83080

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-4620
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Off-white, viscous grease with solvent odor

DANGER

Extremely flammable. Harmful or fatal if swallowed. Contents under pressure.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

- EYE:** May cause mild irritation including stinging and redness, but does not injure eye.
- SKIN:** Single, brief exposures may cause mild irritation. Frequent or prolonged contact may cause more severe irritation, defatting of the skin, and dermatitis.
- INHALATION:** High vapor concentrations are irritating to the respiratory tract and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death. May cause peripheral nervous system disorder and/or damage. Heating the dispensed grease may generate irritating vapors.
- INGESTION:** Low order of toxicity by ingestion. Main hazard is aspiration into the lungs during swallowing or vomiting. Small amounts aspirated into the respiratory system may cause bronchopneumonia or pulmonary adema, possible progressing to death.
- CHRONIC EFFECTS:** Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.
- TARGET ORGANS:** central nervous system, peripheral nervous system, respiratory system

Medical Conditions Aggravated by Exposure: skin and respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Hexane isomers	various	40 - 50
n-Hexane	110-54-3	3.2
Heavy naphthenic petroleum distillates	64742-52-5	10 - 20
Liquefied petroleum gas	68476-86-8	35 - 45

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: DO NOT induce vomiting. Contact a physician immediately.

Note to Physicians: Treat symptomatically. Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is extremely flammable in accordance with aerosol flammability definitions (16 CFR 1500.3(c)(6)).

Flash Point:	< 20 F (TCC)	Upper Explosive Limit:	9.0
Autoignition Temperature:	489 F	Lower Explosive Limit:	1.7

Suitable Extinguishing Media: Class B fire extinguishers, dry chemical, foam or CO2

Products of Combustion: fumes, smoke and carbon monoxide

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water fog or spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Do not spray water directly on fire; product will float and could be reignited on surface of water.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush

into sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Remove all sources of ignition. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Use proper grounding and bonding procedures for transferring materials. Do not use product near any source of ignition. Do not touch container to electrical sources as container will conduct electricity. Avoid contact with eyes and skin. Avoid breathing vapors.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Hexane isomers	500(v)	1000(v)	500	1000	NE		ppm
n-Hexane	500	NE	50(s)	NE	NE		ppm
Heavy naphthenic petroleum distillates	5	NE	NE	NE	NE		mg/m ³
Liquefied petroleum gas	1000	NE	1000	NE	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Engineering Controls: Area should have ventilation to provide fresh air. Use local exhaust to prevent accumulation of vapors. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations

Respiratory Protection: None required for normal work where adequate ventilation is provided. Use a NIOSH-approved cartridge respirator with an organic vapor cartridge if vapors exceed exposure limits. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile, PVC or Viton. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: semi-solid / grease

Color: off-white

Odor: solvent

Specific Gravity: 0.6257
 Initial Boiling Point: 140 F
 Freezing Point: < -50 F
 Vapor Pressure: ND
 Vapor Density: > 1 (air = 1)
 Evaporation Rate: > 1 (Butyl acetate = 1)
 Solubility: not soluble in water
 pH: NA
 Volatile Organic Compounds: wt %: 85 g/L: 531.8 lbs./gal: 4.43

Section 10: Stability and Reactivity

Stability: Stable
 Conditions to Avoid: sources of ignition, temperature extremes
 Incompatible Materials: strong oxidizers
 Hazardous Decomposition Products: oxides of carbon
 Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
n-hexane	LD50	28710 mg/kg	Oral	Rat
n-hexane	LD50	3000 mg/kg	Dermal	Rabbit
n-hexane	LC50	48000 ppm/4H	Inhalation	Rat

CHRONIC EFFECTS

Carcinogenicity:

	<u>Component</u>	<u>Result</u>
OSHA:	None listed	
IARC:	None listed	
NTP:	None listed	

Mutagenicity: No information available

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: n-hexane - 48 Hr EC50 water flea: 3.87 mg/L
 96 Hr LC50 Lepomis macrochirus: 4.12 mg/L
 Persistence / Degradability: No information available

Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Disposal: The packaged liquid product is a RCRA hazardous waste for the characteristic of ignitability with a waste code of D001. The dispensed grease is not a hazardous waste. (See 40 CFR Part 261.20 – 261.33) Aerosol containers should be emptied and depressurized before disposal. Empty containers may be recycled. Any liquid product should be managed as a hazardous waste.

All disposal activities must comply with federal, state and local regulations. Local regulations may be more stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Consumer Commodity, ORM-D

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: n-hexane (5000 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	Yes
	Reactive Hazard	No
	Release of Pressure	Yes
	Acute Health Hazard	Yes
	Chronic Health Hazard	Yes

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
n-hexane (3.2%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): n-hexane

State RegulationsCalifornia Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: NONE

State Right to Know:

New Jersey: 75-83-2, 110-54-3, 79-29-8, 68476-86-8
Pennsylvania: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8
Massachusetts: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8
Rhode Island : 110-54-3, 68476-86-8

Additional Regulatory Information: None

Section 16: Other Information

NFPA: Health: 2 Flammability: 3 Reactivity: 0
HMIS: Health: 2 Flammability: 3 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
CRC #: 568G
Revision Date: 04/02/2007

Changes since last revision: Formula number revised.

The information contained 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. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
PMCC:	Pensky-Martens Closed Cup	g/L:	grams per Liter
PPE:	Personal Protection Equipment	lbs./gal:	pounds per gallon
TWA:	Time Weighted Average	STEL:	Short Term Exposure Limit
OSHA:	Occupational Safety and Health Administration		
ACGIH	American Conference of Governmental Industrial Hygienists		
NIOSH	National Institute of Occupational Safety & Health		



Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: Heavy Duty Degreaser (Aerosol)

Product Number (s): 03095, 03095T, 83095

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-4620
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Colorless liquid; irritating odor at high concentrations

WARNING

Vapor Harmful. Contents Under Pressure.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

EYE: May cause pain and slight eye irritation. Corneal injury is unlikely. Vapors may irritate eyes.

SKIN: Prolonged or repeated exposure may cause skin irritation. May cause drying or flaking of skin. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

INHALATION: Low level exposure may cause anesthetic or irritant effects. Higher exposure levels may lead to dizziness and drunkenness. Progressively higher levels or longer exposure may cause unconsciousness and death.

INGESTION: Single dose oral toxicity is considered to be low. Swallowing large amounts may cause serious injury, even death. If aspirated into lungs, during swallowing or vomiting, liquid may be rapidly absorbed through the lungs and result in injury to other body systems.

CHRONIC EFFECTS: Chronic immersion of skin in this liquid may lead to absorption through skin. This may cause numbness in the immersed area. Excessive inhalation of vapors may increase sensitivity to epinephrine and increase myocardial irritability.

TARGET ORGANS: Central nervous system. Possibly peripheral nervous system, liver or kidney.

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Trichloroethylene (TCE)	79-01-6	95 – 99
1,2-Butylene Oxide	106-88-7	0.5
Carbon Dioxide	124-38-9	1 - 5

Section 4: First Aid Measures

- Eye Contact:** Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.
- Skin Contact:** Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.
- Inhalation:** Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.
- Ingestion:** Do not induce vomiting. Call a physician immediately.

Note to Physicians: Because rapid absorption may occur through lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary. No specific antidote. Supportive care.

Section 5: Fire-Fighting Measures

Flammable Properties: This material is nonflammable according to OSHA definitions, however, it can be made to burn under certain conditions.

Flash Point: None (TCC) Upper Explosive Limit: 44.8%
Autoignition Temperature: 788 F Lower Explosive Limit: 8.0%

Suitable Extinguishing Media: Water fog or fine spray. Carbon dioxide, dry chemical, foam. Class B fire extinguisher.

Products of Combustion: Hydrogen chloride, trace amounts of phosgene, chlorine, and carbon monoxide.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Gases may accumulate in low areas.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8. Do not breathe vapors

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Vapors of this product are heavier than air and will collect in low areas. Make sure ventilation removes vapors from low areas. Do not eat, drink or smoke while using this product.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: I

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Trichloroethylene (TCE)	100	200 (v)	10	25	5	mfg*	ppm
1,2-Butylene oxide	N.E.	N.E.	N.E.	N.E.	2	AIHA	ppm
Carbon dioxide	5000	30000 v	5000	30,000	N.E.		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

* TCE manufacturer's internal PEL

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use NIOSH-approved cartridge respirator with organic vapor cartridges. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as PVA, and Viton. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: Liquid

Color: Colorless

Odor: Irritating odor at high concentrations

Specific Gravity: 1.46 @ 70 F

Initial Boiling Point: 189 F

Freezing Point: ND

Vapor Pressure: 60 mmHg @ 68 F (20 C)

Vapor Density: 4.53 (air = 1)

Evaporation Rate: > 1 (ether = 1)

Solubility: 0.1 g / 100 g @ 25 C (in water)

pH: NA

Volatile Organic Compounds: wt %: 97.0 g/L: 1400 lbs./gal: 11.66

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Avoid direct sunlight or ultraviolet sources. Avoid open flames, welding arcs, or other high temperature sources which induce thermal decomposition.

Incompatible Materials: Avoid contact with metals such as: aluminum powders, magnesium powders, potassium, sodium, and zinc powder. Avoid unintended contact with amines. Avoid contact with strong bases and strong oxidizers.

Hazardous Decomposition Products: Hydrogen chloride, trace amounts of chlorine and phosgene

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
trichloroethylene	LD50	10,000 mg/kg	dermal	rabbit
trichloroethylene	LD50	4920 mg/kg	oral	rat
trichloroethylene	LC50	12,500 ppm (4H)	inhalation	rat
1,2-butylene oxide	LD50	500 mg/kg	oral	rat

CHRONIC EFFECTS

Carcinogenicity:

	<u>Component</u>	<u>Result</u>
OSHA:	trichloroethylene	hazard communication carcinogen
	1,2-butylene oxide	hazard communication carcinogen
IARC:	trichloroethylene	2A (probably carcinogenic)
	1,2-butylene oxide	2B (possibly carcinogenic)

NTP:	trichloroethylene	Reasonably anticipated to be a carcinogen
Mutagenicity:	trichloroethylene	in vitro mutagenicity studies were negative animal mutagenicity studies were predominantly negative
	1,2-butylene oxide	in vitro mutagenicity studies were positive animal mutagenicity studies were negative

Section 12: Ecological Information

Ecotoxicity:	Material is moderately toxic to aquatic organisms on an acute basis.
Persistence / Degradability:	Biodegradation may occur under both aerobic and anaerobic conditions.
Bioaccumulation / Accumulation:	Bioconcentration potential is low (BCF less than 100).
Mobility in Environment:	Potential for mobility in soil is high.

Section 13: Disposal Considerations

Disposal: The dispensed liquid product is a RCRA hazardous waste for toxicity with the following potential waste codes: U228, F001, F002, D040. (See 40 CFR Part 261.20 – 261.33)
Aerosol containers should be emptied and depressurized before disposal. Empty containers may be recycled. Any liquid product should be managed as a hazardous waste.

All disposal activities must comply with federal, state and local regulations. Local regulations may be more stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Consumer Commodity, ORM-D

Special Provisions: None

Section 15: Regulatory Information**U.S. Federal**Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: trichloroethylene (100 lbs)
1,2-butylene oxide (100 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	No
	Reactive Hazard	No
	Release of Pressure	Yes

Acute Health Hazard Yes
Chronic Health Hazard Yes

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
trichloroethylene (96.5%), 1,2-butylene oxide (0.5%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): trichloroethylene, 1,2-butylene oxide

State Regulations

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: trichloroethylene

State Right to Know:

New Jersey: 79-01-6, 106-88-7, 124-38-9
Pennsylvania: 79-01-6, 106-88-7, 124-38-9
Massachusetts: 79-01-6, 106-88-7, 124-38-9
Rhode Island : 79-01-6, 106-88-7, 124-38-9

Additional Regulatory Information: None

Section 16: Other Information

NFPA: Health: 2 Flammability: 1 Reactivity: 0
HMIS: Health: 2 Flammability: 1 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
CRC #: 458
Revision Date: 5/3/2007

Changes since last revision: Section 8 – exposure guidelines

The information contained 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. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
PMCC:	Pensky-Martens Closed Cup	g/L:	grams per Liter
PPE:	Personal Protection Equipment	lbs./gal:	pounds per gallon
TWA:	Time Weighted Average	STEL:	Short Term Exposure Limit
OSHA:	Occupational Safety and Health Administration	PEL:	Permissible Exposure Limit
ACGIH	American Association of Governmental Industrial Hygienists		
NIOSH	National Institute of Occupational Safety & Health		



Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: Moly-Graph® Extreme Pressure Multi-Purpose Lithium Grease

Product Number (s): SL3141, SL3144, SL3145, SL3146, SL3330, 8SL3141

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-8963
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Grey semi-solid to solid grease with a faint petroleum odor

As defined by OSHA's Hazard Communication Standard, this product is nonhazardous.

Potential Health Effects:

EYE: May cause irritation.

SKIN: Repeated or prolonged contact can result in drying of the skin.

INHALATION: Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product.

INGESTION: Can cause stomach ache and vomiting. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.

CHRONIC EFFECTS: Unknown

TARGET ORGANS: None known

Medical Conditions Aggravated by Exposure:

Skin or respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Product Name: Moly-Graph® Extreme Pressure Multi-Purpose Lithium Grease
Product Number (s): SL3141, SL3144, SL3145, SL3146, SL3330, 8SL3141

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Hydrotreated heavy naphthenic distillates	64742-52-5	70 - 90
Lithium 12-hydroxystearate	7620-77-1	5 – 10
Zinc, dithiophosphate di-C1-14-alkyl esters	68649-42-3	0.5 – 1.5
Molybdenum sulfide	1317-33-5	0.2 – 1
Graphite	7782-42-5	0.2 - 1

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do not induce vomiting. Seek medical attention.

Note to Physicians: None available

Section 5: Fire-Fighting Measures

Flammable Properties: This product is nonflammable.

Flash Point:	> 400 F (COC)	Upper Explosive Limit:	7.0
Autoignition Temperature:	ND	Lower Explosive Limit:	0.9

Suitable Extinguishing Media: CO2, dry chemical, sand, dolomite, alcohol resistant foam, water spray

Products of Combustion: Oxides of carbon. Sulfur.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Avoid water in straight hose stream as it will scatter and spread fire.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8. Minimize skin contact.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush

Product Name: Moly-Graph® Extreme Pressure Multi-Purpose Lithium Grease

Product Number (s): SL3141, SL3144, SL3145, SL3146, SL3330, 8SL3141

into sewers or storm drains. Advise authorities if product has entered waterways.

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Keep container away from heat, sparks, and open flame. High temperatures may produce irritating vapors. Eye wash station should be available at work place. Keep containers closed when not in use. Ventilate well, especially in warmer environments.

Storage Procedures: Store in a cool dry area out of direct sunlight. Store separated from acids and oxidizing materials. Store away from sparks and open flame.

Aerosol Storage Level: NA

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Hydrotreated heavy naphthenic distillate	5*	NE	5*	10*	NE		mg/m ³
Lithium 12-hydroxystearate	NE	NE	NE	NE	NE		
Zinc, dithiophosphate di-C1-14-alkyl esters	NE	NE	NE	NE	NE		
Molybdenum sulfide	NE	NE	10	NE	NE		mg/m ³
Graphite	15**	NE	2	NE	2.5	NIOSH	mg/m ³
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated * – oil mist ** - mppcf							

Engineering Controls: Area should have ventilation to provide fresh air. Use local exhaust to prevent accumulation of vapors. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations

Respiratory Protection: None required for normal work where adequate ventilation is provided. Use NIOSH-approved self-contained positive pressure respirators in low circulation areas and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as latex or rubber. Also , use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Product Name: Moly-Graph® Extreme Pressure Multi-Purpose Lithium Grease

Product Number (s): SL3141, SL3144, SL3145, SL3146, SL3330, 8SL3141

Physical State: semi-solid grease

Color: grey

Odor: mild petroleum

Specific Gravity: 0.90 @ 60 F

Initial Boiling Point: ND

Freezing Point: ND

Vapor Pressure: < 0.1 mmHg @ 68 F

Vapor Density: > 5 (air = 1)

Evaporation Rate: < 0.01 (butyl acetate = 1)

Solubility: Insoluble in water

pH: NA

Volatile Organic Compounds: wt %: 0.2 g/L: 1.8 lbs./gal: 0.015

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: None

Incompatible Materials: Avoid contact with acids and oxidizing substances.

Hazardous Decomposition Products: Oxides of carbon. Sulfur

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Naphthenic distillates	LD50	> 5000 mg/kg	Oral	Rat
Naphthenic distillates	LD50	> 2000 mg/kg	Dermal	Rabbit
Naphthenic distillates	LC50	2.18 mg/L/4H	Inhalation	Rat

CHRONIC EFFECTS

Carcinogenicity:

	<u>Component</u>	<u>Result</u>
OSHA:	None listed	
IARC:	None listed	
NTP:	None listed	

Mutagenicity: None available

Other: Naphthenic distillates Base oils of this product contain < 3% DMSO Extractable total polycyclic aromatic compound (PAC) per IP 346.

Product Name: Moly-Graph® Extreme Pressure Multi-Purpose Lithium Grease

Product Number (s): SL3141, SL3144, SL3145, SL3146, SL3330, 8SL3141

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: Naphthenic distillates: 48 Hr EC50 Daphnia magna: >1000 mg/L
Persistence / Degradability: None available
Bioaccumulation / Accumulation: None available
Mobility in Environment: None available

Section 13: Disposal Considerations

Disposal: This product is not a RCRA hazardous waste.

All disposal activities must comply with federal, state and local regulations. Local regulations may be more stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Not Regulated

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: None

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:

Fire Hazard	No
Reactive Hazard	No
Release of Pressure	No
Acute Health Hazard	No
Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
Zinc compounds (< 1.5%)

Product Name: Moly-Graph® Extreme Pressure Multi-Purpose Lithium Grease
Product Number (s): SL3141, SL3144, SL3145, SL3146, SL3330, 8SL3141

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

State Regulations

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: None

State Right to Know:

New Jersey: 1317-33-5
Pennsylvania: 7782-42-5
Massachusetts: 1317-33-5, 7782-5
Rhode Island : 7782-42-5

Additional Regulatory Information: None

Section 16: Other Information

NFPA: Health: 1 Flammability: 1 Reactivity: 0
HMIS: Health: 1 Flammability: 1 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
CRC #: 2127
Revision Date: 04/23/2007

Changes since last revision: Spanish part number added

The information contained 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. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
PMCC:	Pensky-Martens Closed Cup	g/L:	grams per Liter
PPE:	Personal Protection Equipment	lbs./gal:	pounds per gallon
TWA:	Time Weighted Average	STEL:	Short Term Exposure Limit
OSHA:	Occupational Safety and Health Administration	COC:	Cleveland Open Cup
ACGIH	American Association of Governmental Industrial Hygienists		
NIOSH	National Institute of Occupational Safety & Health		
mppcf	Millions of particles per cubic foot (of air)		