CRC MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: Red Grease #2

Product Number (s): SL3400

Product Use: Lubricating grease

Manufacturer / Supplier Contact Information:

In United States: CRC Industries, Inc. 885 Louis Drive Warminster, PA 18974 <u>www.crcindustries.com</u> 1-215-674-4300 (General) (800) 521-3168 (Technical) (800) 272-4620 (Customer Service) In Canada: CRC Canada Co. 2-1246 Lorimar Drive Mississauga, Ontario L5S 1R2 <u>www.crc-canada.ca</u> 1-905-670-2291 In Mexico: CRC Industries Mexico Av. Benito Juárez 4055 G Colonia Orquídea San Luís Potosí, SLP CP 78394 www.crc-mexico.com 52-444-824-1666

24-Hr Emergency - CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

As defined by OSHA's Hazard Communication Standard, this product is non-hazardous. Appearance & Odor: Red semi-solid to solid grease with a faint petroleum odor

Potential Health Effects:

ACUTE 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 discomfort, stomach ache and vomiting. May cause liver and/or renal damage.

CHRONIC EFFECTS: Unknown

TARGET ORGANS: Skin, mucous membranes, eyes

Medical Conditions Aggravated by Exposure: Skin or respiratory conditions

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

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Petroleum base oils, highly refined	64742-52-5 / 64742-65-0 / 64741-88-4	80 - 90
Lithium 12-hydroxystearate	7620-77-1	5 – 10
Boric acid, tris(2-ethylhexyl) ester	2467-13-2	1 – 5
Zinc, dithiophosphate di-C1-14-alkyl esters	68649-42-3	0.5 – 1.5
Antimony dialkyldithiocarbamate	Proprietary	< 0.5

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. Seek medical attention. Rinse mouth and throat with water. Do not give milk or oil. Drink large amounts of water.
Note to Physicians:	Treat symptomatically.

Section 5: Fire-Fighting Measures

Flash Point:	defined by OSHA, this produ 410°F / 210°C (COC) ND	uct is not flammable. Upper Explosive Limit: Lower Explosive Limit:	ND ND
Fire and Explosion Data:			
Suitable Extinguishing Media:	CO2, dry chemical, sand, d	olomite, foam	
Products of Combustion: Oxides of carbon, phosphorus or sulfur. Acrid smoke/fumes.			
Explosion Hazards: Containers, when exposed to heat from fire, may build pressure and rupture.			
r s a	skin protection should be prov	and possible toxic decon vided. Use water spray to hich may result from produ	ved breathing apparatus for nposition products. Proper eye and b keep fire-exposed containers cool uct decomposition. Avoid water in

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

Methods for Containment & Clean-up:

Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Wipe up spilled material. 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. Avoid breathing vapors. Eye wash stations should be available at work place. Keep containers closed when not in use. Ventilate well, especially in warmer environments. For product use instructions, please see the product label.
Storage Procedures: Store in a cool dry area out of direct sunlight. Containers should be tightly closed while in storage. 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:

	OS	SHA	AC	GIH	0	THER	
COMPONENT	TWA	STEL	TWA	STEL	TWA	SOURCE	UNIT
Petroleum base oils, highly refined	5*	NE	5*	10*	NE		mg/m ³
Lithium 12-hydroxystearate	NE	NE	NE	NE	NE		
Boric acid, tris(2-ethylhexyl) ester	NE	NE	NE	NE	NE		
Zinc, dithiophosphate di-C1-14-alkyl esters	NE	NE	NE	NE	NE		
Antimony dialkyldithiocarbamate	0.5	NE	0.5	NE	NE		mg/m ³
N.E. – Not Established	(c) – ce	iling (s)	– skin	(v) – vad	cated	* – oil mist	

Controls and Protection:

- 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. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses.

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

Section 9: Physical and Chemical Properties

Physical State: s	semi-solid grease			
Color: red				
Odor: mild pet	troleum			
Odor Threshold:	ND			
Specific Gravity:	0.90 @ 60°F / 15.6°C			
Initial Boiling Point:	: ND			
Freezing Point:	ND			
Vapor Pressure:	< 0.1 mmHg @ 68°F / 20°C			
Vapor Density:	> 5 (air = 1)			
Evaporation Rate:	slow			
Solubility: insol	luble in water			
Coefficient of water	r/oil distribution: ND			
pH: NA				
Volatile Organic Co	ompounds: <u>wt %</u> : 0	<u>g/L</u> :	0	<u>lbs./gal:</u> 0

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, phosphorus, 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 Toxicity:

<u>Component</u>	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Petroleum base oils, highly refined	> 5000 mg/kg	> 2000 mg/kg	No data
Lithium 12-hydroxystearate	No data	No data	No data
Boric acid, tris(2-ethylhexyl) ester	No data	No data	No data
Zinc, dithiophosphate di-C1-14-alkyl	4739 mg/kg	> 2000 mg/kg	No data
esters			
Antimony dialkyldithiocarbamate	No data	No data	No data

OSHA	IARC	NTP		
Carcinogen	Carcinogen	<u>Carcinogen</u>	Irritant	<u>Sensitizer</u>
No	No	No	Unknown	Unknown
No	No	No	Mild (S)	Unknown
No	No	No	Unknown	Unknown
No	No	No	Unknown	Unknown
No	No	No	Unknown	Unknown
		E – Eye	S – Skin	R - Respiratory
	Carcinogen No No No No	Carcinogen NoCarcinogen NoNoNoNoNoNoNoNoNoNoNo	Carcinogen NoCarcinogen NoCarcinogen NoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNo	Carcinogen NoCarcinogen NoIrritant UnknownNoNoNoNoNoNoNoMild (S)NoNoNoUnknownNoNoNoUnknownNoNoNoUnknownNoNoNoUnknownNoNoNoUnknown

<u>Reproductive Toxicity</u> :	no information available
Teratogenicity:	No information available
Mutagenicity:	No information available
Synergistic Effects:	No information available
Other:	Base oils of this product have been highly refined to remove aromatics and
	meet the IP 346 criteria of < 3% PAH's.

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

<u>Waste Classification</u>: This product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33) Empty containers may be recycled.

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

Section 14: Transport Information

- US DOT (ground): Not Regulated
- ICAO/IATA (air): Not Regulated
- IMO/IMDG (water): Not Regulated

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal Regulations:

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

Chronic Health Hazard No	Section 311/312 Hazard Categories:	Fire Hazard Reactive Hazard Release of Pressure Acute Health Hazard Chronic Health Hazard	No No No No
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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%), Antimony compounds (<0.5%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

U.S. State Regulations:

<u>California Safe Drinking Water and Toxic Enforcement Act (Prop 65)</u>: This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: None

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:

New Jersey:68649-42-3, RTK# 800983-5015PPennsylvania:68649-42-3Massachusetts:NoneRhode Island:None

Canadian Regulations:

Controlled Products Regulations:

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

WHMIS Hazard Class: D2B

<u>Canadian DSL Inventory</u>: All ingredients are either listed on the DSL Inventory or are exempt.

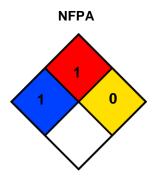
European Union Regulations:

<u>RoHS Compliance</u>: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information: None

Section 16: Other Information

HMIS® (II)		
Health:	1	
Flammability:	1	
Reactivity:	0	
PPE:	В	



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By:	Michelle Rudnick
CRC #:	2495CRC
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Changes since last revision: New product

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. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists NA: Not Applicable Not Determined CAS: **Chemical Abstract Service** ND: NIOSH: National Institute of Occupational Safety & Health CFR: Code of Federal Regulations DOT: Department of Transportation NFPA: National Fire Protection Association DSL: **Domestic Substance List** NTP: National Toxicology Program Occupational Safety and Health Administration g/L: grams per Liter OSHA: **HMIS**: Hazardous Materials Identification System PMCC: Pensky-Martens Closed Cup IARC: International Agency for Research on Cancer PPE: Personal Protection Equipment International Air Transport Association IATA: ppm: Parts per Million ICAO: International Civil Aviation Organization RoHS: Restriction of Hazardous Substances STEL: IMDG: International Maritime Dangerous Goods Short Term Exposure Limit International Maritime Organization TCC: Tag Closed Cup IMO: lbs./gal: pounds per gallon TWA: **Time Weighted Average** Lethal Concentration WHMIS: Workplace Hazardous Materials Information LC: Lethal Dose System LD: