

SAFETY DATA SHEET

1. Identification

Product identifier	Moly-Graph® Extreme Pressure Multi-Purpose Grease		
Other means of identification			
Product code	SL3141		
Recommended use	Lubricating grease		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplie	r/Distributor information		
Manufactured or sold by:			
Company name	CRC Industries, Inc.		
Address	885 Louis Dr.		
	Warminster, PA 18974 US		
Telephone			
General Information	215-674-4300		
Technical Assistance	800-521-3168		
Customer Service	800-272-4620		
24-Hour Emergency	800-424-9300 (US)		
(CHEMTREC)	703-527-3887 (International)		
Website	www.crcindustries.com		

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
	$\mathbf{\wedge}$	
	\mathbf{V}	
Signal word	Warning	
Hazard statement	May cause an allergic skin reaction. Causes serious eye irritation.	
Precautionary statement		
Prevention	Avoid breathing vapors. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear eye protection/face protection. Wear protective gloves.	
Response	If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.	
Storage	Store away from incompatible materials.	
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.	
Hazard(s) not otherwise classified (HNOC)	None known.	

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
distillates (petroleum), hydrotreated heavy naphthenic		64742-52-5	80 - 90
phosphorodithioic acid, o,o-di-c1-14-alkyl esters, zinc salts		68649-42-3	1 - 3
calcium bis(dinonylnaphthalenesulphonate)		57855-77-3	< 1

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Provide oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.
Skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions	Use water spray to cool unopened containers.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	The product is immiscible with water and will spread on the water surface. Prevent entry into waterways, sewer, basements or confined areas.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Conditions for safe storage, including any incompatibilities

Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	Form
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
US. ACGIH Threshold Lin Components	nit Values Type	Value	Form
	TWA		-
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.
US. NIOSH: Pocket Guide	to Chemical Hazards		_
Components	Туре	Value	Form
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
ological limit values	No biological exposure limits noted for	•	
posure guidelines	Occupational Exposure Limits are not		•
propriate engineering ntrols	Good general ventilation (typically 10 should be matched to conditions. If ap or other engineering controls to mainta exposure limits have not been establis eyewash station.	plicable, use process enclose ain airborne levels below reco	ures, local exhaust ventilation ommended exposure limits. If
dividual protection measure	s, such as personal protective equipme	ent	
Eye/face protection	Wear safety glasses with side shields	(or goggles).	
Skin protection			
Hand protection	Wear protective gloves such as: Rubb	er. Latex.	
Other	Wear appropriate chemical resistant c	lothing.	
Respiratory protection	If engineering controls are not feasible NIOSH-approved cartridge respirator breathing apparatus in confined space determine actual employee exposure	with an organic vapor cartridges and for emergencies. Air m	e. Use a self-contained
Thermal hazards	Wear appropriate thermal protective c	lothing, when necessary.	
eneral hygiene nsiderations	Always observe good personal hygien and before eating, drinking, and/or sm equipment to remove contaminants. C workplace.	oking. Routinely wash work	clothing and protective

err nyerear ana er				
Appearance				
Physical state	Solid.			
Form	Grease.			

Color	Gray.
Odor	Mild petroleum.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	680 °F (360 °C) estimated
Flash point	$>400\ ^{\circ}\text{F}$ (> 204.4 $^{\circ}\text{C})$ Cleveland Open Cup
Evaporation rate	Slow.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	324146.3 hPa estimated
Vapor density	> 5 (air = 1)
Relative density	0.9
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	500 °F (260 °C) estimated
Decomposition temperature	Not available.
Viscosity (kinematic)	Not available.
Percent volatile	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Metal oxides.

11. Toxicological information

Information on likely routes of	exposure			
Inhalation	Prolonged inhalation may be harmful.			
Skin contact	May cause an allergic sk	in reaction.		
Eye contact	Causes serious eye irrita	Causes serious eye irritation.		
Ingestion	Can cause stomach ache and vomiting.			
Symptoms related to the physical, chemical and toxicological characteristics	Prolonged or excessive inhalation may cause respiratory tract irritation. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.			
Information on toxicological effects				
Acute toxicity	May cause an allergic skin reaction. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.			
Product	Species	Test Results		
Moly-Graph® Extreme Pressure Multi-Purpose Grease				
Acute				
Dermal				
LD50	Rabbit	2353 mg/kg estimated		

Product	Species	Test Results
Oral		
LD50	Rat	5824 mg/kg estimated
* Estimates for product may b	e based on additional component data not shown.	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation	on.
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Based on available data, the classification criteria are not met.	
IARC Monographs. Overall	Evaluation of Carcinogenicity	
Not available.		
US. National Toxicology Pro	ogram (NTP) Report on Carcinogens	
Not available.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged exposure may cause chronic effects.	

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment		
Components		Species	Test Results
distillates (petroleum), hydro	treated heav	y naphthenic (CAS 64742-52-5)	
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1000 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	5000 mg/l, 96 hours
phosphorodithioic acid, o,o-	di-c1-14-alkyl	esters, zinc salts (CAS 68649-42-3)	
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1 - 5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales prome	elas) 1 - 5 mg/l, 96 hours
* Estimates for product may	be based on	additional component data not shown.	
Persistence and degradability	Not readil	y biodegradable.	
Bioaccumulative potential	No data a	No data available.	
Mobility in soil	No data a	No data available.	
Other adverse effects		No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	
13. Disposal considerati	ons		
Disposal of waste from residues / unused products	This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste		

Persistence and degradability	Not readily biodegradable.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Disposal of waste from residues / unused products	This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.	
Hazardous waste code	Not regulated.	
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.	

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

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US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA Section 12(b) Export	Notification (40 CFR 707, Subpt. D)
Not regulated. US. OSHA Specifically Regu	ulated Substances (29 CFR 1910.1001-1050)
Not listed. SARA 304 Emergency relea	se notification
Not regulated. US EPCRA (SARA Title III) S	Section 313 - Toxic Chemical: Listed substance
phosphorodithioic acid, o CERCLA Hazardous Substa	,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3) nce List (40 CFR 302.4)
phosphorodithioic acid, o CERCLA Hazardous Substa	,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3) nces: Reportable quantity
Not listed.	
	g in the loss of any ingredient at or above its RQ require immediate notification to the National 24-8802) and to your Local Emergency Planning Committee.
Clean Air Act (CAA) Section	112 Hazardous Air Pollutants (HAPs) List
Not regulated. Clean Air Act (CAA) Section	112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.	
Safe Drinking Water Act (SDWA)	Not regulated.
Food and Drug Administration (FDA)	Not regulated.
Superfund Amendments and	d Reauthorization Act of 1986 (SARA)
Section 311/312 Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
US state regulations	
US. California. Candidate Cl (a))	hemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.
distillates (petroleum), hy US. Massachusetts RTK - So	drotreated heavy naphthenic (CAS 64742-52-5) ubstance List
None. US. California Controlled Su	ubstances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed. US. Rhode Island RTK	
	,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3) I Community Right-to-Know Act
· ·	,o-di-c1-14-alkyl esters, zinc salts (CAS 68649-42-3) n d Community Right-to-Know Law
Not listed.	

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s))	Not determined
Consumer products (40 CFR 59, Subpt. C)	Not regulated

State

nsumer products	Not regulated	
VOC content (CA)	Not determined	
VOC content (OTC)	Not determined	

International Inventories

Consu

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (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)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

16. Other information, including date of preparation or last revision

Issue date	07-30-2015
Revision date	02-18-2016
Prepared by	Allison Cho
Version #	03
Further information	Not available.
HMIS® ratings	Health: 1 Flammability: 1 Physical hazard: 0 Personal protection: B
NFPA ratings	Health: 1 Flammability: 1 Instability: 0
NFPA ratings	

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