



Safety Data Sheet

Issue Date: 05-Jun-2014

Revision Date: 20-May-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name AUTOGUARD HI-TEMP LITHIUM COMPLEX GREASE

Other means of identification

SDS # AG-001

Recommended use of the chemical and restrictions on use

Recommended Use Lubricant.

Details of the supplier of the safety data sheet

Supplier Address

Warren Oil Company
915 E. Jefferson Ave.
West Memphis, AR 72301

Emergency Telephone Number

Company Phone Number 1-800-428-9284
Emergency Telephone (24 hr) CHEMTREC 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Appearance Red semi-solid to solid **Physical State** Semi-solid to solid **Odor** Mild petroleum

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Signal Word

Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection

Precautionary Statements - Response

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 advice/attention
 IF ON SKIN: Wash with plenty of soap and water
 Take off contaminated clothing and wash it before reuse
 If skin irritation occurs: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown Acute Toxicity

2.27% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Severely Hydrotreated Heavy Naphthenic Petroleum Oil	64742-52-5	60-70
Residual oils (petroleum), solvent refined	64742-01-4	1-10
Antimony diamyldithiocarbamate	15890-25-2	1-10
Lithium Hydroxide Solution	1310-66-3	1-10

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures**General Advice**

If exposed or concerned: Get medical advice/attention. Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid.

Eye Contact

Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness or pain persists.

Skin Contact

If burned by hot material, cool skin by quenching with large amounts of cool water. For contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Clean or discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.

Inhalation

Vaporization is not expected at ambient temperatures. This material is not expected to cause inhalation-related disorders under anticipated conditions of use. In case of overexposure, move the person to fresh air.

Ingestion

Do not induce vomiting unless directed to by a physician. Rinse out mouth with water. Never give anything by mouth to a person who is not fully conscious. Allow small quantities to pass through the digestive system. If large amounts are swallowed or irritation of discomfort, seek medical attention immediately.

Most important symptoms and effects

Symptoms May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Skin: In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal. Ingestion: Check for possible bowel obstruction with ingestion of large quantities of material.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use dry chemical, foam, carbon dioxide or water fog.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Water or foam may cause frothing. Molten material can form flaming droplets if ignited. Use of water on product above 100°C (212°F) can cause product to expand with explosive force.

Hazardous Combustion Products Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur, phosphorus, zinc and/ or nitrogen.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces. Fight the fire from a safe distance in a protected location. Open any masses with a water stream to prevent re-ignition due to smoldering. Cool surface with water fog. Do not allow liquid runoff to enter sewers or public waters.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to section 8. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Slipping hazard; do not walk through spilled material.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewer, basements or confined areas.

Methods for Clean-Up For small spills, absorb or cover with dry earth, sand or other inert non-combustible absorbent material and place into waste containers for lateral disposal. Contain large spills to maximize product recovery or disposal. In urban areas, clean up spill as soon as possible. In natural environments, seek clean up advice from specialists to minimize physical habitat damage.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling If this product is stored or applied in high-pressure systems such as grease guns or hydraulic lines, there is the potential for accidental injection into the skin and underlying tissues. Empty containers may contain product residue that can ignite with explosive force. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Severely Hydrotreated Heavy Naphthenic Petroleum Oil 64742-52-5	TWA: 5 mg/m ³ (oil mist) STEL: 10 mg/m ³ (oil mist)	TWA: 5mg/m ³ (oil mist) STEL: none estab.	TWA: none estab. STEL: none estab.
Antimony diamyldithiocarbamate 15890-25-2	TWA: 0.5 mg/m ³ Sb	TWA: 0.5 mg/m ³ Sb (vacated) TWA: 0.5 mg/m ³ Sb	IDLH: 50 mg/m ³ Sb TWA: 0.5 mg/m ³ Sb
Barium Sulfonate 25619-56-1	TWA: 0.5 mg/m ³ Ba	TWA: 0.5 mg/m ³ Ba (vacated) TWA: 0.5 mg/m ³ Ba	TWA: 0.5 mg/m ³ except Barium sulfate Ba

Appropriate engineering controls

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Chemical resistant, impermeable gloves. Long sleeve shirt and long pants. Aprons. Wear a lab coat.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Semi-solid to solid	Odor	Mild petroleum
Appearance	Red semi-solid to solid	Odor Threshold	Not determined
Color	Red		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not available	
Melting Point/Freezing Point	Not available	
Boiling Point/Boiling Range	Not available	
Flash Point	150 °C / 302 °F	Open cup
Evaporation Rate	Not available	
Flammability (Solid, Gas)	Not determined	

Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	<01001 kPA (<0.01 mm Hg)(at 20°C)	
Vapor Density	>10	(Air=1)
Specific Gravity	0.93	(Water = 1)
Water Solubility	Negligible	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Property	Values	Remarks • Method
Auto-ignition Temperature	Not available	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Not expected to occur.

Conditions to Avoid

Keep away from extreme heat, sparks, open flame and incompatible materials.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur, phosphorus, zinc and/ or nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact Causes skin irritation.

Inhalation Do not inhale.

Ingestion May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
----------------------	------------------	--------------------	------------------------

Lubricating oils (petroleum), hydrotreated spent 64742-58-1	> 2000 mg/kg (Rat)	> 4480 mg/kg (Rabbit)	-
Residual oils (petroleum), solvent refined 64742-01-4	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2.18 mg/L (Rat) 4 h
Azelaic acid 123-99-9	> 5 g/kg (Rat)	-	-

Information on physical, chemical and toxicological effects**Symptoms**

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Carcinogenicity**

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity

2.27% of the mixture consists of ingredient(s) of unknown toxicity.

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.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Severely Hydrotreated Heavy Naphthenic Petroleum Oil 64742-52-5		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Lubricating oils (petroleum), hydrotreated spent 64742-58-1		79.6: 96 h Brachydanio rerio mg/L LC50 semi-static 3.2: 96 h Pimephales promelas mg/L LC50 semi-static		
Residual oils (petroleum), solvent refined 64742-01-4		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Antimony diamyldithiocarbamate 15890-25-2	Toxic

14. TRANSPORT INFORMATION

Note	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
DOT	Not regulated
IATA	Not regulated
IMDG	Not regulated

15. REGULATORY INFORMATION**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Severely Hydrotreated Heavy Naphthenic Petroleum Oil	Present	X		Present		Present	X	Present	X	X
Residual oils (petroleum), solvent refined	Present	X		Present			X	Present	X	X
Antimony diamyldithiocarbamate	Present	X		Present		Present	X		X	X
Lithium Hydroxide Solution						Present	X		X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Antimony diamyldithiocarbamate - 15890-25-2	15890-25-2	2.25	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Antimony diamyldithiocarbamate		X		

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Antimony diamyldithiocarbamate 15890-25-2	X		X
Lithium Hydroxide Solution 1310-66-3	X		
Barium Sulfonate 25619-56-1	X		X

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	1	1	0	Not determined
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection
	1	1	0	Not determined

Issue Date: 05-Jun-2014
Revision Date: 20-May-2015
Revision Note: New format

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.

End of Safety Data Sheet