

SAFETY DATA SHEET

1. Identification

Identification

Product name: RL 68H (4316-44, 4316-46, 4316-45, 4316-41)

Additional identification

Chemical name: Mixture

Recommended use and restriction on use

Recommended use: Not determined.

Restrictions on use: Not determined.

Details of the supplier of the safety data sheet

Supplier

Company Name: THE LUBRIZOL CORPORATION
Address: 29400 LAKELAND BOULEVARD
WICKLIFFE, OH 44092-2298
US
Telephone: (440)943-1200

Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300 (LUBRIZOL)

2. Hazard(s) identification

Hazard Classification

Not classified

Label Elements:

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: not applicable

Precautionary Statement: not applicable

Other hazards which do not result in GHS classification: None identified.

3. Composition/information on ingredients

General information: The components are not hazardous or are below required disclosure limits.

4. First-aid measures

Ingestion: Treat symptomatically. Get medical attention.

Inhalation: Remove exposed person to fresh air if adverse effects are observed. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If experiencing respiratory symptoms call a poison center or doctor.

Skin Contact: Wash with soap and water. If skin irritation occurs, get medical attention. Remove contaminated clothing. Launder contaminated clothing before reuse.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: See section 11.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: Use water to cool containers exposed to fire.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: CO₂, dry chemical, foam, water spray, water fog.

Unsuitable extinguishing media: Not determined.

Specific hazards arising from the chemical: See section 10 for additional information. Water may cause splattering. Container may rupture on heating. Burning may produce irritating, toxic and obnoxious fumes.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Recommend wearing self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Only trained personnel should be permitted in area. Caution: Contaminated surfaces may be slippery.

Methods and material for containment and cleaning up: Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

Environmental Precautions: Avoid release to the environment. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment.

Keep containers closed when not in use. Avoid eye contact. Avoid repeated or prolonged skin contact. When using do not eat, drink or smoke. Product can accumulate static charge when handled. Equipment should be grounded. Use grounding and bonding connection when transferring material. Use spark-proof tools and explosion-proof equipment. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition.

Maximum Handling Temperature:

Not determined.

Conditions for safe storage, including any incompatibilities:

Store away from incompatible materials. See section 10 for incompatible materials. Store away from oxidizers. Keep container tightly closed. Do not store in open, unlabeled or mislabeled containers.

Maximum Storage Temperature:

Not determined.

8. Exposure controls/personal protection**Control Parameters:****Occupational Exposure Limits**

None of the components have assigned exposure limits.

Appropriate engineering controls:

Use material in well ventilated area only. Adequate ventilation should be provided so that exposure limits are not exceeded. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment**General information:**

Use personal protective equipment as required.

Eye/face protection:

If contact is likely, safety glasses with side shields are recommended.

Skin Protection**Hand Protection:**

Neoprene. Consult clothing/glove manufacturer to determine appropriate type of glove for given situation. Gloves should always be inspected before each use and discarded if they show tears, pinholes, or signs of wear. Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.

Other:

Long sleeve shirt is recommended. Do not wear rings, watches or similar apparel that could entrap the material.

Respiratory Protection:

Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Use respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless to yellow
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	518 °F (270 °C) (Cleveland Open Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	0.977 68 °F (20 °C)
Solubility(ies)	
Solubility in water:	Slightly Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	Approximate 72.3 mm ² /s (162.1 °F (72.3 °C)) Approximate 9.8 mm ² /s (100 °C (212 °F))
Other information	
Pour Point Temperature:	Approximate -38 °F (-39 °C)

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of Hazardous Reactions:	Will not occur.
Conditions to Avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials.
Incompatible Materials:	Strong oxidizing agents. Strong acids. Strong bases.
Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

11. Toxicological information

Information on likely routes of exposure

Inhalation: No data available.

Ingestion: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity

Oral

Product: LD 50 (Rat): > 2,000 mg/kg (Read across) Not classified

Dermal

Product: LD 50 (Rabbit): > 2,000 mg/kg (Read across) Not classified

Inhalation

Product: Not classified for acute toxicity based on available data.

Skin Corrosion/Irritation:

Product: Classification: May cause irritation. (Read across); Rabbit.
Remarks: Not classified as a primary skin irritant.
Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

Serious Eye Damage/Eye Irritation:

Product: Classification: May cause irritation. (Read across); Rabbit.
Remarks: Not classified as a primary eye irritant.

Respiratory sensitization:

No data available

Skin sensitization:

Product: Classification: Not a skin sensitizer. (Read across) Not a skin sensitizer.

Specific Target Organ Toxicity - Single Exposure:

Product: If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Aspiration Hazard:

No data available

Chronic Effects

Carcinogenicity:

No data available

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity: No data available

Reproductive toxicity: No data available

Specific Target Organ Toxicity - Repeated Exposure: No data available

12. Ecological information

Ecotoxicity

Fish

Product: LC 50 (Fathead Minnow, 4 d): > 10,000 mg/l

Aquatic Invertebrates

Product: EC 50 (Water flea (Daphnia magna), 2 d): > 1,000 mg/l

Toxicity to Aquatic Plants

Product: EC 50 (Green algae (Selenastrum capricornutum), 4 d): > 1,000 mg/l

Toxicity to soil dwelling organisms

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganisms

Product: EC 50 (Sludge, 0.1 d): > 10,000 mg/l

Persistence and Degradability

Biodegradation

Product: OECD TG 302 B, 35 %, 28 d, Not readily degradable.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

No data available

Partition Coefficient n-octanol / water (log Kow)

No data available

Mobility:

No data available

Other Adverse Effects:

No data available.

13. Disposal considerations

- Disposal instructions:** Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied.
- Contaminated Packaging:** Container packaging may exhibit hazards.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

None known.

SARA 302 Extremely Hazardous Substance

SARA 304 Emergency Release Notification

SARA 311/312 Hazardous Chemical

SARA 313 (TRI Reporting)

This product may contain chemical(s) regulated under the Superfund Amendments and Reauthorization Act (SARA). For additional information please contact Lubrizol Customer Assistance: America(s): AmerLZAMCustomerAssistance@Lubrizol.com ; Europe: EMEAICustomerAssistance@Lubrizol.com ; Asia: APCustomerAssistance@Lubrizol.com

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

Inventory Status

Australia (AICS)

All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)

All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACH)

To obtain information on the REACH compliance status of this product, please visit Lubrizol.com/REACH, or e-mail us at REACH_MSDS_INQUIRIES@Lubrizol.com

Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

Korea (ECL)

All components are in compliance in Korea.

New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA)

All components of this product are listed on the Taiwan inventory.

United States (TSCA)

All components of this material are on the US TSCA Inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

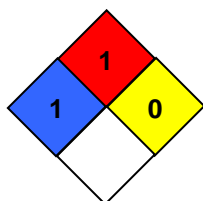
16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	1
Flammability	1
Physical Hazards	0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Red	Flammability
Blue	Health
Yellow	Reactivity
White	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date:	03/08/2015
Version #:	1.0
Source of information:	Internal company data and other publically available resources.
Further Information:	Contact supplier (see Section 1)

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