



# MATERIAL SAFETY DATA SHEET

CONFORMS TO DIRECTIVE 2001/58/EC AMENDING DIRECTIVE 91/155/EEC

## Section 1. Identification of the Company and the Preparation

**Product Name** JAX HALO-GUARD FG-2 (AEROSOL)

**Revision Date** 9/2/2008

**Supersedes Date** 3/12/2008

**Supplier** PRESSURE-LUBE, INC.  
W134 N5373 CAMPBELL DRIVE  
MENOMONEE FALLS, WI 53051 USA

**Product No.** JAX213

**Material Use** Lubricant

**Non-Emergency Contact** Phone: 1-800-782-8850 (North America) +01-262-781-8850 (International)

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**In Case of Emergency** CHEMTREC: 1-800-424-9300 (North America) +01-703-527-3887 Collect (International)

## Section 2. Composition / Information on Ingredients

This preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Components listed below either meet the reporting requirements as specified in U.S. 29 CFR 1910.1200 or EU Directive 1999/45/EC as amended, or are reported for informational purposes only.

Ingredient*	%	PEL/TLV, Source	CAS #	EINECS #	EU Hazard Symbol	R-Phrases**
Heptane	30-50	400 ppm, OSHA	142-82-5	205-563-8	F; Xn; N	R11-38-50/53-65-67
Propane	5-10	1000 ppm, OSHA	74-98-6	200-827-9	F+	R12
n-Butane	5-10	800 ppm, OSHA	106-97-8	203-448-7	F+	R12
Zinc oxide	1-5	5 mg/m <sup>3</sup> (fumes), OSHA	1314-13-2	215-222-5	N	R50/53

\*See Section 11 for LD<sub>50</sub> and LC<sub>50</sub> of ingredients.

\*\*See Section 16 for full text of R-Phrases.

## Section 3. Hazards Identification

**Physicochemical Hazards** Extremely flammable

**Human Health Hazards** See Section 11.

**Environmental Hazards** Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

## Section 4. First Aid Measures

**Eye Contact** Flush with large amounts of water, occasionally lifting upper and lower eyelids. Get medical attention.

**Skin Contact** Thoroughly wash exposed area with soap and water. Remove contaminated clothing and launder it before reuse. Should any irritation persist, get medical attention.

**Ingestion** Ingestion is not likely as an aerosol but, if ingested, DO NOT induce vomiting. If spontaneous vomiting is about to occur, place the victim's head below his knees to prevent aspiration. Never give anything by mouth to an unconscious person. Do not leave victim unattended. Call a physician or transport to an emergency facility.

**Inhalation** If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm and quiet. Get medical attention.

## Section 5. Firefighting Measures

**Flash Point** N/A

**Autoignition Temperature** N/A

**Sensitive to Mechanical Impact** No

**Sensitive to Static Discharge** N/A

**Lower Flammability Limit** N/A

**Upper Flammability Limit** N/A

**Extinguishing Media** Extinguishing media include dry chemical, alcohol foam, and carbon dioxide-type extinguishing agents. Do not use direct stream of water. Water may be used to keep fire-exposed containers cool.

**Special Hazards** Keep exposed containers cool with water spray to prevent rupture. Do not puncture or incinerate cans. Never use welding or cutting torch on or near this product because even just residue can ignite explosively. Firefighters should wear full protective gear, including SCBA's in a positive-pressure mode with full face shield. Vapors are heavier than air and may travel long distances and accumulate in low areas or spread along ground away from handling site. Eliminate all sources of ignition. Do not use direct stream of water because product will float and can reignite on surface of water.

**Products of Combustion** Carbon monoxide and carbon dioxide.

**Special Protective Equipment for Firefighters** Firefighters should wear full protective clothing, including helmet, and NIOSH-approved self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive-pressure mode.

## Section 6. Accidental Release Measures

<b>Personal Precautions</b>	Extinguish all sources of ignition. Provide sufficient ventilation and/or respiratory protection. Wear appropriate protective clothing, gloves, face mask, goggles/glasses to prevent contact with the eyes and skin. See Section 8.
<b>Environmental Precautions</b>	Keep product out of sewers and watercourses by diking or impounding. Advise authorities if the product has entered or may enter sewers, watercourses, or extensive land areas.
<b>Methods for Clean-Up</b>	Recover free product using non-sparking tools. Add sand, earth, or other suitable absorbent material to the spill area. Dispose of in accordance with national and/or local regulations relating to waste disposal.

## Section 7. Handling and Storage

<b>Handling</b>	Keep away from heat, sparks, open flame or where temperature may exceed 49°C (120°F). "Empty" containers retain product residue and can be dangerous. Do not cut, weld, braze, solder, drill, or grind such containers as they may explode and can cause injury or death. Do not throw empty container into fire or trash compactor. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Use only with adequate ventilation. Do not breathe vapor or mist. Do not take internally. Do not transfer to nor store in an unmarked container. Read label and MSDS before using. Do not smoke when handling or using this product. For industrial use only.
<b>Storage</b>	Store in tightly sealed containers. Do not store in direct sunlight. Keep away from heat, sparks and open flame. Store containers below 120°F (49°C). Do not throw empty container into fire or trash compactor.

## Section 8. Exposure Controls / Personal Protection

<b>Occupational Exposure Limit</b>	5 mg/m <sup>3</sup> (oil mist) OSHA, for total product; see Section 2 for component exposure limit(s).
<b>Respiratory Protection</b>	Use with adequate ventilation. Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure. In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH/MSHA-approved air-supplied respirator is advised in absence of proper environmental control.
<b>Ventilation</b>	Local mechanical exhaust ventilation capable of maintaining emissions at the point of use below the PEL/TLV.
<b>Protective Gloves</b>	Use protective gloves if contact with product is likely.
<b>Eye Protection</b>	Chemical splash goggles or face shield are advised when eye contact may occur.
<b>Personal Hygiene</b>	Wash exposed areas with soap and water when finished using this product. Do not eat or drink when using this product. Do not swallow. Wash hands before eating or using washroom.
<b>Engineering Controls</b>	Implement engineering controls so that workplace exposure limit(s) of product or any component is not exceeded. Use impervious protective clothing (gloves, boots, apron or full body suit) depending on operation.

## Section 9. Physical and Chemical Properties

<b>Appearance/Odor</b>	Cream-colored with mild solvent odor	<b>Vapor Pressure</b>	N/A
<b>pH</b>	N/A	<b>Solubility in Water</b>	Negligible
<b>Boiling Point</b>	N/A	<b>Density</b>	North America: 6.001 lbs/gallon (typical) European Union: 0,719 g/cm <sup>3</sup> (typical)
<b>Oxidizing Properties</b>	Not an oxidizer	<b>Viscosity</b>	N/A
<b>Percent Volatile</b>	50-60	<b>Vapor Density</b>	Heavier than air
<b>Coefficient of Water/Oil Distribution</b>	N/A	<b>Evaporation Rate</b>	Slower than ether
<b>Partition Coefficient: n-octanol/water</b>	N/A	<b>Physical State</b>	Liquid, grease, and compressed gas in aerosol can

## Section 10. Stability and Reactivity

<b>Conditions and Materials to Avoid</b>	Avoid heat, sparks, open flames, welding arcs, direct sunlight and other high temperature sources. Avoid strong oxidizers.
<b>Hazardous Polymerization</b>	Hazardous polymerization will not occur.
<b>Hazardous Decomposition Products</b>	Carbon monoxide and carbon dioxide.

## Section 11. Toxicological Information

<b>Routes of Entry</b>	Skin contact, eye contact, ingestion and inhalation.
<b>Skin</b>	<b>Skin Contact:</b> Skin irritant. Mild to severe skin irritation may occur upon prolonged or repeated contact. Prolonged or repeated contact may cause moderate to severe dermatitis. Chronic symptoms may include drying, swelling, scaling, blistering, cracking, and severe tissue damage.

**Skin Absorption:** A single prolonged skin exposure is not likely to result in harmful amounts absorbed, but this product may be readily absorbed through the skin producing central nervous system depression effects.

<b>Eye</b>	Considered an eye irritant. Vapors may cause severe eye irritation. Symptoms can include redness, swelling, pain, tearing, and hazy vision.
<b>Ingestion</b>	ASPIRATION HAZARD. Ingestion is not likely as an aerosol but, if swallowed, it can be harmful or fatal. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, even death. May cause weakness and gastrointestinal tract irritation. Product can be readily absorbed through the stomach and intestinal tract. Symptoms include a burning sensation in the mouth or esophagus, nausea, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness, and delirium. Additional central nervous system effects may occur prior to the onset of convulsions, coma, and death.
<b>Inhalation</b>	This product may irritate the mucous membranes of the mouth, throat, and esophagus, and may cause nausea, loss of appetite, lassitude, light-headedness, giddiness, dizziness, and incoordination. Respiratory arrest, convulsions, semi-consciousness or unconsciousness may result from extreme exposure. Can cause central nervous system depression. Asthma and other respiratory ailments may be aggravated by exposure to product. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

**Acute Toxicity /  
LD<sub>50</sub> and LC<sub>50</sub> of  
Ingredients**

Ingredient	LD <sub>50</sub>	LC <sub>50</sub>
Heptane	Oral/Rat > 15000 mg/kg	Inhalation/Rat = 103 g/m <sup>3</sup> /4h
Propane	N/A	Inhalation/Rat = 361 g/m <sup>3</sup>
n-Butane	N/A	Inhalation/Rat = 658 g/m <sup>3</sup> /4h
Zinc oxide	Oral/Rat > 15000 mg/kg	Inhalation/Rat > 5.7 mg/l/4h

**Chronic Toxicity /  
Carcinogenicity**

Ingredient	CAS #	NTP Known Carcinogen	NTP Anticipated Carcinogen	IARC Group
Heptane	142-82-5	No	No	No
Propane	74-98-6	No	No	No
n-Butane	106-97-8	No	No	No
Zinc oxide	1314-13-2	No	No	No

## Section 12. Ecological Information

<b>Ecotoxicity</b>	N/A	<b>Bioaccumulative Potential</b>	N/A
<b>Mobility</b>	N/A	<b>Persistence and Degradability</b>	N/A

## Section 13. Disposal Considerations

<b>Waste Disposal</b>	Consult national or regional authorities for proper disposal and reporting procedures. All disposals must comply with national and regional regulations.
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## Section 14. Transportation Information

Dangerous goods descriptions may not reflect package size, quantity, end-use or region-specific exceptions that can be applied to shipments. Consult shipping documents for material-specific descriptions.

### U.S. D.O.T.

<b>Proper Shipping Name:</b>	Aerosols, flammable, n.o.s.
<b>UN Number:</b>	UN1950
<b>Hazard Class:</b>	2.1
<b>Packing Group:</b>	None
<b>Remarks</b>	None

### Land Transport ADR/RID

<b>Proper Shipping Name</b>	Aerosols, flammable, n.o.s.
<b>UN Number</b>	UN1950
<b>Hazard Class</b>	2.1
<b>Packing Group</b>	None

### Maritime Transport IMDG

<b>Proper Shipping Name</b>	N/A
<b>IM Number</b>	N/A
<b>IMDG Code</b>	N/A

Packing Group N/A

**Air Transport IATA**

Proper Shipping Name N/A  
 UN Number N/A  
 Hazard Class N/A  
 Packing Group N/A  
 Remarks N/A

**Section 15. Regulatory Information****U.S. Federal Regulations**

**CERCLA** Release of the following chemical(s) at quantities equal to or greater than the reportable quantities (RQ), is regulated by 40 CFR 302.4 :  
 None

**SARA (Section 313)** This product contains the following chemical(s) listed in Section 313 at or above the de minimis concentrations:  
 Zinc oxide, CAS #1314-13-2, present at 1-5%

**SARA Extremely Hazardous List** This product contains greater than 1.0% of the following chemical(s) on the SARA Extremely Hazardous Substances List:  
 None

**TSCA Inventory** All components of this material are on the U.S. TSCA Inventory.

**State Regulations**

**California Prop. 65** This product contains the following chemical(s) known to the State of California to cause birth defects or other reproductive harm:  
 None

**European Community Regulations**

The content and format of this Material Safety Data Sheet are in accordance with Commission Directive 2001/58/EC, amending for the second time Commission Directive 91/155/EEC.

**European Community Label Requirements****Danger Symbol(s)**

F+

Xn

N

**S-Phrase(s)**

S16: Keep away from sources of ignition - No smoking  
 S23: Do not breathe gas/fumes/vapor/spray  
 S24: Avoid contact with skin  
 S46: If swallowed, seek medical advice immediately and show this container or label  
 S47: Keep at temperature not exceeding 49°C (120°F)  
 S51: Use only in well-ventilated areas  
 S61: Avoid release to the environment. Refer to special instructions/safety data sheet  
 S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

**R-Phrase(s)**

R12: Extremely flammable  
 R38: Irritating to skin  
 R44: Risk of explosion if heated under confinement  
 R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
 R67: Vapors may cause drowsiness and dizziness

Note: Preparations classified as harmful on the basis of an aspiration hazard need not be labeled as harmful with R65 when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment (EU Directive 67/548/EEC Annex VI, 9.4).

**Canada**

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

**Section 16. Other Information****Component R-Phrase(s)**

R11: Highly flammable  
 R12: Extremely flammable  
 R38: Irritating to skin  
 R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
 R65: Harmful: may cause lung damage if swallowed  
 R67: Vapors may cause drowsiness and dizziness

**HMIS® Ratings**

Health: **1** Fire: **4** Physical Hazard: **0**

HMIS® Ratings: 0 = Minimal Hazard; 1 = Slight Hazard; 2 = Moderate Hazard; 3 = Serious Hazard; 4 = Severe Hazard

**Abbreviations that May Be** N/A = Not available

**Used in this Document** N/E = Not established

**Sections Revised** New MSDS format

**Revision Date** 9/2/2008

The information and recommendations contained herein are, to the best of Pressure-Lube, Inc.'s knowledge and belief, accurate and reliable as of the date issued. Pressure-Lube, Inc. makes no warranty or guarantee, expressed or implied, of their accuracy or reliability, and Pressure-Lube, Inc. shall not be liable for any loss or damage based up on the criteria supplied by the developers of these rating systems, together with Pressure-Lube, Inc.'s interpretation of the available data.

\*\*\* END OF MSDS \*\*\*



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