Hartland Lubricants & Chemicals

914 Commercial Court PO Box 809 Onalaska, WI 54650 608-779-6353

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

TRADE NAME: Hartland GP Cutting & Grinding Oil

PRODUCT USE: Straight Oil

24 HOUR PROFESSIONAL EMERGENCY RESOURCE SERVICES (PERS) 1-800-633-8253

Revision Date: November 29, 2011

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT NAME:CAS No.WeightDistillates, Petroleum, Solvent-Refined Light Paraffinic64741-89-594-99%Distillates, Petroleum, Heavy Paraffinic (CAS NOS 64741-88-4 & 64742-65-0)Mixture1-5%

COMPOSITION COMMENTS: Refer to Section 8 for exposure limits on ingredients. This product does not contain any substances greater than 0.1% that are considered by OSHA, NTP, IARC or ACGIH to be 'probable' or 'suspected' human carcinogens.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Concentrate may cause irritation to eyes and skin. Exposure to vapors generated at high temperatures, may cause respiratory irritation. Prolonged exposure to product mist or vapors may cause respiratory irritation. Not regarded as a health hazard under current legislation.

ACUTE EFFECTS: None known

CHRONIC EFFECTS: Sensitization - no known information

CARCINOGENICITY: IARC: Not listed NTP: Not listed OSHA: Not regulated TERATOGENICITY: No data available to indicate product or any components contained at greater

than 0.1% may cause birth defects.

HEALTH WARNINGS:

INHALATION: Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperatures is unlikely due to the low volatility of this product. Inhalation of product vapor or mist may cause irritation of mucous membranes in nasal passages and throat.

SKIN CONTACT: Slightly irritating. Repeated or prolonged contact can result in drying of the skin. EYE CONTACT: Irritating. Liquid, vapor and mists may cause discomfort in the eye with severe transient conjunctivitis. Serous corneal injury is not anticipated.

INGESTION: Can cause stomach ache and vomiting. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.

OTHER INFORMATION:

ROUTE OF ENTRY: Skin and/or eye contact. Ingestion. Inhalation.

SECTION 4: FIRST AID MEASURES

INHALATION: Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor of hot product, immediately remove from source of exposure. Get medical attention if any discomfort continues. For breathing difficulties oxygen may be necessary. If breathing stops, provide artificial respiration.

EYES: Important! Immediately rinse with water for at least 15 minutes. Get medical attention if any discomfort continues.

SKIN: Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

INGESTION: DO NOT INDUCE VOMITING. Get medical attention immediately.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: 177(C°) 351(F°) Cd OC (Cleveland Open Cup)

FLAMMABILITY LIMIT - LOWER (%): N/D FLAMMABILITY LIMIT - UPPER (%): N/D

EXTINGUISHING MEDIA: Use dry chemicals, sand, dolomite, etc. Foam. Carbon Dioxide (CO2). SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures. Caution should be exercised when using water or foam as frothing may occur.

UNUSUAL FIRE & EXPLOSION HAZARDS: Pressure will increase in over heated, closed containers. Not flammable according to national regulations concerning flammable goods.

HAZARDOUS COMBUSTION PRODUCTS: Acrid smoke and fumes. Hydrocarbons. Oxides of Carbon. PROTECTIVE MEASURES IN CASE OF FIRE: Self-contained breathing equipment and chemical resistant clothing recommended.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Minimize skin contact. Avoid breathing vapors. Wear an appropriate respirator if exposure exceeds recommended guidelines.

PRECAUTIONS TO PROTECT THE ENVIRONMENT: Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.

SPILL CLEAN-UP PROCEDURES: Keep all sources of ignition and hot metal surfaces away from spill. Avoid contact with eyes or skin. Place leaking containers in will ventilated area. If fire potential exists, blanket spill with foam or use water spray to disperse vapors. Contain spill to minimize contaminated area and facilitate salvage or disposal. To clean up spill, flush area sparingly with water or use absorbent material. Avoid discharge to natural water ways.

SECTION 7: HANDLING AND STORAGE

HANDLING PRECAUTIONS: Keep away from heat, sparks and open flame. Do not reuse container. Keep lid closed when not in use. Do not store or mix with strong oxidizers. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Avoid spilling, skin and eye contact. Eye wash and emergency shower must be available at the work place.

STORAGE PRECAUTIONS: Keep away from heat, sparks and open flame. Store separate from strong acids and oxidizers.

STORAGE CRITERIA: Chemical storage.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

COMPONENT: STD TWA STEL TWA STEL

Distillates, Petroleum OSHA 5 mg/m3**(1)

Solvent-Refined Light Paraffinic ACGIH 5 mg/m3**(1) 10 mg/3m**(1)

Distillates, Petroleum, Heavy Paraffinic OSHA 5 mg/m3**(1)

(CAS NOS 64741-88-4 & 64742-65-0) ACGIH 5 mg/m3**(1) 10 mg/3m**(1)

INGREDIENT COMMENTS: **(1) For respirable oil mist.

PROTECTIVE EQUIPMENT: Safety Gloves. Safety Glasses.

ENGINEERING CONTROLS: Use engineering controls to reduce air contamination to permissible exposure level.

VENTILATION: No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.

RESPIRATORS: No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

PROTECTIVE GLOVES: For prolonged or repeated skin contact, use suitable protective gloves. Use protective gloves made of neoprene, nitrile, polyethylene or PVC.

EYE PROTECTION: Wear splash-proof eye goggles to prevent any possibility of eye contact.

PROTECTIVE CLOTHING: Wear appropriate clothing to prevent repeated or prolonged skin contact. HYGIENIC WORK PRACTICES: Wash at the end of each work shift and before eating, smoking and using the toilet.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE / PHYSICAL STATE: Clear Liquid COLOR: Yellow

ODOR: Mild or faint Petroleum SOLUBILITY DESCRIPTION: Insoluble in water

BOILING POINT: >149°C (>300°F) PRESSURE: 760mmHg
DENSITY: ~0.849 TEMPERATURE: 16°C (61°F)

VAPOR DENSITY (air=1) >5

VAPOR PRESSURE: <0.01 mmHg TEMPERATURE: 20°C (68°F) EVAPORATION RATE: <0.01 REFERENCE: BuAc=1

pH-VALUE, CONC. SOLUTION: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Normally stable

CONDITIONS TO AVOID: Avoid contact with acids and oxidizing substances. Avoid heat, flames and

other sources of ignition.

HAZARDOUS POLYMERIZATION: Will not occur POLYMERIZATION DESCRIPTION: Not applicable

HAZARDOUS DECOMPOSTION PRODUCTS: Oxides of Carbon, Sulfur, Chlorine

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: No experimental toxicological data on the preparation as such is available.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: There is no ecological data on the product itself

BIOACCUMULATION: Not determined BIODEGRADABILITY: Not determined ACUTE AQUATIC TOXICITY: Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Spilled material, unused contents and empty containers must be disposed of in accordance with Local, State and Federal regulations.

SECTION 14: TRANSPORT INFORMATION

DOT HAZARD CLASS: Non-Hazardous (No label required)

IDENTIFICATION NO.: Not applicable SEA TRANSPORT NOTES: Not regulated Not regulated

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

COMPONENT: SARA 302 CERCLA SARA 313 Distillates, Petroleum, Solvent-Refined Light Paraffinic N/A N/A N/A N/A N/A N/A

(CAS NOS 64741-88-4 & 64742-65-0)

REGULATORY STATUS: None

CLEAN AIR ACT US STATE REGULATIONS

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

INVENTORIES

COMPONENT: CAN US EU AUS JAP KOR SHN PHLP

Distillates, Petroleum, Solvent-Refined

Light Paraffinic DSL Yes

Distillates, Petroleum, Heavy Paraffinic

(CAS NOS 54741-88-4 & 64742-65-0) DSL Yes

SECTION 16: OTHER INFORMATION

HEALTH: Irritation, minor residual injury (1) - HMIS / NFPA
FLAMMABILITY: Burns only if pre-heated (1) - HMIS / NFPA

REACTIVITY: Normally stable (0) - HMIS / NFPA

LAST REVISION: 1-9-2009

DISCLAIMER: While the information and recommendations set forth herein are believed to be accurate as of the date thereof, we make no warranty with respect thereto and disclaim all liability from reliance therein.