Material Safety Data Sheet

Section 1 Product Identification Product Name: Hartland Machine Shop Cleaner Formula type: Alkaline detergent

Supplier's Na me: Hartland Lubricants & Chemicals 914 Commercial Court Onalaska, WI 54650

Emergency: 800-633-8253 Information: 800-658-9051 Fax: 608-779-5137

Section 2 Hazardous Ingredients

				Threshold Limit	Permissible	
Chemical Name		CAS#	%	Value (TLV)	Exposure Limit (PEL)	
Sodium metasilicate		6834-92-0	5-10	2mg/m³ dust	2mg/m ³ dust	
Glycol ether EB		111-76-2	5-10	50 ppm Skin	25 ppm skin	
Glycol ether DPM		34590-94-8 0-5 100 ppm (s		100 ppm (skin) OS	kin) OSHA	
Detergent — proprietary			4-10	NA	NA	
C						
Section 3	Physical Data					
Form: Liquid			pH as is: 12.2 - 12.7			
Color:	Color: Red		Solubility in Water: Complete			
Odor:	Slight solvent			Vapor Density (Air	= 1): >1	
Specific Gravity = 1.06 - 1.07 at 60∘F				% VO C: <10		
Boiling Point °F: 200 °F (initial boiling point)				Vapor pressure: 0.88 mmHG @ 25°		
•	Rate (n-Butyl acetate	• • • •	• •	9		

Section 4 Fire and Explosion Information

Flash Point (Method) F: Not flammable — product contains water

Unusual Fire and Explosion Hazards: Contact with metal can form hydrogen gas that is flammable and can form explosive mixtures with air. High temperatures may create heavy flammable vapors that may settle along ground level and low spots to create an invisible fire hazard.

Extinguishing Agents: Foam, carbon dioxide, dry chemical, water fog, water

Firefighting methods: General guidelines as this material won't burn without driving off water. Evacuate area and fight fire from a safe distance. If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor and to protect personnel attempting to stop a leak. Use water spray to cool adjacent structures and to protect personnel. Shut off source of flow if possible. Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of storage tank due to fire. Fire fighters must wear MSHA/NIOSH approved positive pressure breathing apparatus with full face mask and full protective equipment.

Section 5	Health Hazard Data — Signs and Symptoms of Overexposure:						
Probable Routes of Entry: Eyes, skin, inhalation							

- Eyes: Direct contact will cause severe irritation and burns if not properly treated. Effects may range from mild to irreversible damage and blindness depending upon length of exposure, solution concentration and first aid measures.
- Skin: This product contains materials that can cause severe skin irritation. Prolonged or repeated contact may result in burns and irreversible damage. Prolonged exposure to diluted product can cause irritation.

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- Inhalation: Overexposure by inhalation of misted product may lead irritation in respiratory tract, producing a burning, choking sensation. Caution should be taken to prevent atomizing or misting of this product without proper respiratory protection.
- Ingestion: Ingestion is not expected to be a primary route of exposure. Do not ingest. Material will cause severe burns in mouth, throat and stomach. Note: Aspiration is a secondary hazard and should be expected. Product will attack lining of esophagus and stomach.

Section 6 Emergency First Aid Procedures

- Eyes: Check for and remove contact lenses. Flush immediately with copious amounts of water for 15 minutes while holding eyelids apart to ensure complete irrigation of eye and eyelid tissues. Take exposed individual immediately to a health care professional, preferably an ophthalmologist, for emergency first aid and further evaluation.
- Skin: Remove contaminated clothing. Immediately wash exposed area with copious amounts of water. Repeat washing. If redness or irritation occurs, seek immediate medical attention. Launder contaminated clothing before reuse.
- Inhalation: If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty breathing or is cyanotic, seek a health care professional immediately. Administer CPR if necessary.
- Ingestion: Drink 1-2 large glasses of milk or water. Obtain immediate medical aid or call poison control. Do not induce vomiting unless directed by a physician. During vomiting there is a danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Gastric lavage should be performed only by qualified medical personnel. Keep affected person warm and at rest. Seek immediate medical attention or call 911.

Section 7 Reactivity Data

Stability: Stable at room temperature (68F) when stored and used under proper conditions.

- Incompatibility: Avoid contact with acids and oxidizing materials. Contact with metals can form flammable hydrogen gas.
- Hazardous Decomposition Products: Smoke, carbon dioxide, carbon monoxide, oxides of nitrogen and sulfur, reactive hydrocarbons and irritating vapors.

Hazardous Polymerization: Will not occur.

Section 8 Spill & Leak Procedures

Procedures for Cleanup: Wear protective gear. Small spills: Mop thoroughly and rinse with water. Large Spills: Evacuate area. Eliminate ignition sources. Block potential routes to water systems (sewers, streams, etc.) with inert material such as sand or dirt. Salvage for reuse if possible. Place into disposal containers. Wash down affected areas with clear water. R CRA regulated. Call local Emergency Response agency to report spill.

Waste Disposal: Contact the proper county, state or federal authorities. R CRA regulated.

Section 9 Special Protection Information

Ventilation Type Required: Use adequate ventilation when working with material in an enclosed area.
Mechanical methods such as fume hoods or area fans may be used to reduce
localized vapor/mist areas. If vapor or mist is generated when the material handled,
adequate ventilation in accordance with good engineering practice must be
provided to maintain concentrations below the specified exposure.Eye Protection:Eye protection must be worn. Wear safety glasses with side shields or vented
splash proof goggles.Protective Gloves:Impervious gloves such as neoprene or nitrile rubber to avoid skin sensitization and
absorption.

Section 10 Special Precautions

Product should be stored between 40 and 95°F. Store out of direct sunlight. Keep out of reach of children. Keep container closed when not in use. For industrial and institutional use only. Mix only with water. Thoroughly rinse empty containers before disposal. Use only in well-ventilated area. Do not breathe vapors. Wash hands thoroughly after handling.

Section 11 Toxicity Data

Carcinogenicity: NTP: No IAR C: No OSHA: No Glycol ether EB — inhalation exposure to pregnant rabbits caused some toxicity to mother and fetus at 200 ppm, but no effects at 100 ppm. Rat studies indicate the rat kidneys may be the target organs for over exposure, but rat liver changes may also be evident. There is no evidence that this occurs in humans.

Section 12 HMIS Hazard Rating

0 = Minimal 1 = Sligl	ht 2= Moderate	3= Serious	4= Severe
Health: 2	Reactivity: 0	Fire: 1	Special: personal protection: B

Section 13 Regulatory

Glycol ether EB (111-76-2): listed on TS CA inventory; reportable under Section 313 of SARA; listed on State Right-to-Know in CA, NJ, and PA.

Section 14 Shipping Name Corrosive liquid, basic, inorganic, n.o.s., (disodium trioxosilicate), 8, UN3266, PGIII

Section 15 Documentary Information Date issued: 4-9-2004 Supercedes:

Reason for update:

ABBREVIATIONS: NA = NOT APPLICABLE NDA = NO DATA AVAILABLE> = GREATER THAN<=LESS THAN</td>ND= NOT DETERMINED

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