SAFETY DATA SHEET



1. Identification

	20040
Product code HILC Recommended use Uter	20040
Recommended use Uter	0040
	10012
	nsil Presoaking Liquid Detergent.
Recommended restrictions For	Labeled Use Only
Manufacturer/Importer/Supplier/Distri	butor information
Manufacturer	
Company name HILL	YARD INDUSTRIES
Address 302	North Fourth St.
St. J	

Contact person	Regulatory Affairs
Telephone number	(816) 233-1321 (Ext. 8285)
Fax	(816) 383-8485
E-mail	regulatoryaffairs@hillyard.com
Emergency telephone #	(800) 424-9300
	(Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals)

2. Hazard(s) identification

Storage

Disposal

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Signal word	Danger	
Hazard statement	Causes severe skin burns and eye dama	age.
Precautionary statemen	ıt	
Prevention	Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	water for several minutes. Remove cont Immediately call a POISON CENTER or immediately all contaminated clothing. R before reuse. IF INHALED: Remove victi	doctor/physician. IF IN EYES: Rinse cautiously with act lenses, if present and easy to do. Continue rinsing. doctor/physician. IF ON SKIN (or hair): Remove/Take off inse skin with water/shower. Wash contaminated clothing im to fresh air and keep at rest in a position comfortable N CENTER or doctor/physician. IF SWALLOWED: Rinse

Dispose of contents/container to an approved waste disposal plant.

mouth. Do NOT induce vomiting.

Store locked up.

Supplemental information

3. Composition/information on ingredients

None.

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Tetrapotassium Pyrophosphate		7320-34-5	12
POTASSIUM HYDROXIDE		1310-58-3	2.25
Other components below reportal	ble levels		85.75

Other components below reportable levels

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures Inhalation Move to fresh air. Call a physician if symptoms develop or persist. Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse. Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately. Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may Most important include stinging, tearing, redness, swelling, and blurred vision. Prolonged contact may cause symptoms/effects, acute and permanent damage to eyes. May be harmful if ingested. May cause irritation/burns to mouth and delayed esophagus, nausea, vomiting and diarrhea. Indication of immediate Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an medical attention and special ambulance. Continue flushing during transport to hospital. Keep victim under observation. treatment needed Symptoms may be delayed. **General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. 5. Fire-fighting measures Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire. media Specific hazards arising from During fire, gases hazardous to health may be formed. the chemical Special protective equipment Self-contained breathing apparatus and full protective clothing must be worn in case of fire. and precautions for firefighters **Fire fighting** Move containers from fire area if you can do so without risk. equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials. Specific methods General fire hazards No unusual fire or explosion hazards noted. 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Conditions for safe storage, including any incompatibilities

Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation.

Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. ACGIH Threshold Limit Components	Values Type	Value	
POTASSIUM HYDROXIDE (CAS 1310-58-3)	Ceiling	2 mg/m3	
US. NIOSH: Pocket Guide to	Chemical Hazards		
Components	Туре	Value	
POTASSIUM HYDROXIDE (CAS 1310-58-3)	TWA	2 mg/m3	
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.		
Individual protection measures, Eye/face protection	such as personal protective equipr Wear safety glasses with side shield		
Skin protection			
Hand protection	Wear appropriate chemical resistant gloves.		
Other	Avoid contact with the skin. Wear appropriate chemical resistant clothing.		
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.		
Thermal hazards	None known.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

9. Physical and chemical properties

Appearance	Clear, blue liquid
Physical state	Liquid.
Form	Liquid.
Color	Blue
Odor	Odorless.
Odor threshold	Not available.
рН	9.7 - 10.4 (1% solution)
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Upper/lower flammability or exp	Iosive limits
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.24 at 77°F
Solubility(ies)	
Solubility (water)	Soluble
Partition coefficient	Not available.
(n-octanol/water)	
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	10.33 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	73.8 - 74.4
VOC	Not available

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Carbon monoxide. Carbon dioxide (CO2). Oxides of phosphorus and potassium. Toxic fumes of sodium oxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity	Not known.	
Components	Species	Test Results
POTASSIUM HYDROXIDE (CA	S 1310-58-3)	
<u>Acute</u>		
Oral		
LD50	Rat	273 mg/kg
* Estimates for product may	be based on additional component data not shown.	
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitizati	on	
Respiratory sensitization	Not a respiratory sensitizer.	

	Species	Test Results	
LC50	Fish	3555.5557 mg/l, 96 hours estimated	
	Species	Test Results	
4% of the mix	ture consists of component	s(s) of unknown hazards to the aquatic environment.	
		nentally hazardous. However, this does not exclude the have a harmful or damaging effect on the environment.	
ı			
Prolonged inh	nalation may be harmful.		
Not an aspiration hazard.			
Not classified			
This product is not expected to cause reproductive or developmental effects.			
ulated Substan	ces (29 CFR 1910.1001-10	50)	
ogram (NTP) R	eport on Carcinogens		
Evaluation of C	Carcinogenicity		
	• •	umans.	
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.			
This product is not expected to cause skin sensitization.			
	mutagenic or Not classifiab Evaluation of C ogram (NTP) R ulated Substan This product Not classified Not classified Not an aspira Prolonged inh The product i possibility tha 4% of the mix	mutagenic or genotoxic. Not classifiable as to carcinogenicity to h Evaluation of Carcinogenicity ogram (NTP) Report on Carcinogens alated Substances (29 CFR 1910.1001-10 This product is not expected to cause rep Not classified. Not classified. Not an aspiration hazard. Prolonged inhalation may be harmful. The product is not classified as environm possibility that large or frequent spills car 4% of the mixture consists of component Species	

POTASSIUM HYDROXIDE (CAS 1310-58-3)

Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	80 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.	
Local disposal regulations	Dispose in accordance with all applicable regulations.	
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.	
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).	
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.	

14. Transport information

DOT

UN number	NA1760
UN proper shipping name	Compounds, Cleaning Liquid (POTASSIUM HYDROXIDE)

Transport hazard class(es) Class 8 Subsidiary risk _ Ш Packing group Special precautions for user Read safety instructions, SDS and emergency procedures before handling. PACKAGES 1 GALLON AND SMALLER ARE SHIPPED LIMITED QUANTITY OR ORM-D Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code DOT CORROSIVE This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping **General information** instructions. 15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) POTASSIUM HYDROXIDE (CAS 1310-58-3) Listed. SARA 304 Emergency release notification Not regulated. US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not regulated. Superfund Amendments and Reauthorization Act of 1986 (SARA) **Hazard categories** Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance Not listed. SARA 311/312 Hazardous No chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Safe Drinking Water Act Not regulated. (SDWA) **US state regulations** California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. International Inventories Country(s) or region Inventory name On inventory (yes/no)* Australia Australian Inventory of Chemical Substances (AICS) Yes Domestic Substances List (DSL) Canada No Canada Non-Domestic Substances List (NDSL) No China Inventory of Existing Chemical Substances in China (IECSC) Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

ubstances Control Act (TSCA) Inventory United States & Puerto Rico

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date	11-04-2017
Revision date	03-21-2018
Version #	02
HMIS® ratings	Health: 2 Flammability: 0 Physical hazard: 0
Disclaimer	No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.
Revision information	Hazard(s) identification: Hazard(s) not otherwise classified (HNOC) Composition / Information on Ingredients: Ingredients First-aid measures: Most important symptoms/effects, acute and delayed Handling and storage: Precautions for safe handling Handling and storage: Conditions for safe storage, including any incompatibilities Physical & Chemical Properties: Multiple Properties Stability and reactivity: Conditions to avoid Stability and reactivity: Hazardous decomposition products Stability and reactivity: Incompatible materials Ecological information: Ecotoxicity GHS: Classification