SAFETY DATA SHEET



1. Identification

Product identifier	SUPER STRIP
Other means of identification	
SDS number	538N-41A
Product code	HIL00152
Recommended use	Stripper
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/	Distributor information
Manufacturer	
Manufacturer	
Company name	HILLYARD INDUSTRIES
Address	302 North Fourth St.
	St. Joseph, MO 64501
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

Physical hazards	Not classified.	
Health hazards	Acute toxicity, dermal	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Signal word	Danger	

	Signal word	Danger
	Hazard statement	Harmful in contact with skin. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.
	Precautionary statement	
	Prevention	Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
	Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Take off contaminated clothing and wash before reuse.
	Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
	Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
	lazard(s) not otherwise lassified (HNOC)	None known.
S	Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ethylene glycol monobutyl ether		111-76-2	20 - < 30
Ethanol, 2-amino-		141-43-5	3 - < 5
POTASSIUM HYDROXIDE		1310-58-3	1 - < 3
Silicic acid, Sodium Salt		6834-92-0	1 - < 3
Other components below reportable lev	vels		70 - < 80

Other components below reportable levels

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a poison control center immediately. Chemical burns must be treated by a physician. W 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.
Most important symptoms/effects, acute and delayed	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. May cause respiratory irritation.
Indication of immediate medical attention and special treatment needed	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 ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.
5. Fire-fighting measures	
Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials. General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Specific methods

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear Personal precautions, appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do protective equipment and emergency procedures 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	This product is miscible in water.	
containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. 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.	
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.	
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.	
7. Handling and storage		
Precautions for safe handling	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.	
Conditions for safe storage	Store locked up. Store in original tightly closed container. Store away from incompatible materials	

Conditions for safe storage, Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Ту	ре	Val	ue	
Ethanol, 2-amino- (CAS 141-43-5)	PE	L	6 m	g/m3	
			3 p	om	
Ethylene glycol monobutyl ether (CAS 111-76-2)	PE	L	240	mg/m3	
			50	opm	
US. ACGIH Threshold Lim	it Values				
Components	Ту	ре	Val	ue	
Ethanol, 2-amino- (CAS 141-43-5)	ST	EL	6 p	om	
	TM	/A	3 p	om	
Ethylene glycol monobutyl ether (CAS 111-76-2)	ΤW	ΙA	20	opm	
POTASSIUM HYDROXIDE (CAS 1310-58-3)	Ce	iling	2 m	g/m3	
US. NIOSH: Pocket Guide	to Chemical Hazard	S			
Components	Ту	ре	Val	ue	
Ethanol, 2-amino- (CAS 141-43-5)	ST	EL	15	ng/m3	
,			6 p	om	
	TM	/A	8 m	g/m3	
			3 p	om	
Ethylene glycol monobutyl ether (CAS 111-76-2)	ТМ	ΙΑ	24	mg/m3	
· · · · ·			5 p	om	
POTASSIUM HYDROXIDE (CAS 1310-58-3)	TW	ΙΑ	2 m	g/m3	
ogical limit values					
ACGIH Biological Exposu	re Indices				
Components	Value	Determinant	Specimen	Sampling Time	
Ethylene glycol monobutyl ether (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA),	Creatinine in urine	*	

* - For sampling details, please see the source document.

Exposure guidelines				
US - California OELs: Skin designation				
Ethylene glycol monobutyl ether (CAS 111-76-2) US - Minnesota Haz Subs: Skin designation applies		Can be absorbed through the skin.		
Ethylene glycol monobuty US - Tennessee OELs: Skin	. ,	Skin designation applies.		
Ethylene glycol monobuty US NIOSH Pocket Guide to C	l ether (CAS 111-76-2) Chemical Hazards: Skin desigi	Can be absorbed through the skin. n ation		
	l ether (CAS 111-76-2) or Air Contaminants (29 CFR	•		
Ethylene glycol monobuty	l ether (CAS 111-76-2)	Can be absorbed through the skin.		
controls should be matched to condition or other engineering controls to exposure limits have not been		ally 10 air changes per hour) should be used. Ventilation rates ns. If applicable, use process enclosures, local exhaust ventilation, o maintain airborne levels below recommended exposure limits. If established, maintain airborne levels to an acceptable level. Eye shower must be available when handling this product.		
Individual protection measures, such as personal protective equipment Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.				
Skin protection Hand protection	Wear appropriate chemical res	sistant gloves.		
Other	her Wear appropriate chemical resistant clothing. Use of an impervious apron is recommend			
Respiratory protection	atory protection In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respiratory organic vapor cartridge.			
Thermal hazards	Wear appropriate thermal prote	ective clothing, when necessary.		
General hygiene considerations		I hygiene measures, such as washing after handling the material d/or smoking. Routinely wash work clothing and protective nants.		

9. Physical and chemical properties

s. I hysical and chemical	•
Appearance	Clear, colorless to amber liquid
Physical state	Liquid.
Form	Liquid.
Color	Colorless to amber
Odor	Mild solvent odor
Odor threshold	Not available
рН	Not available.
Melting point/freezing point	Not applicable / Not available
Initial boiling point and boiling	204 °F (95.56 °C) Corr.
range	
Flash point	> 200.0 °F (> 93.3 °C) Tag Closed Cup
Evaporation rate	< 1 Slower than 1 Ethyl ether = 1
	Not available.
Flammability (solid, gas)	NOT available.
Flammability (solid, gas) Upper/lower flammability or exp	
Upper/lower flammability or exp	losive limits
Upper/lower flammability or exp Explosive limit - lower (%)	Iosive limits Not available.
Upper/lower flammability or exp Explosive limit - lower (%) Explosive limit - upper (%)	Iosive limits Not available. Not available.
Upper/lower flammability or exp Explosive limit - lower (%) Explosive limit - upper (%) Vapor pressure	losive limits Not available. Not available. 16.3 mm Hg
Upper/lower flammability or exp Explosive limit - lower (%) Explosive limit - upper (%) Vapor pressure Vapor density	Iosive limits Not available. Not available. 16.3 mm Hg 1.5 Air=1
Upper/lower flammability or exp Explosive limit - lower (%) Explosive limit - upper (%) Vapor pressure Vapor density Relative density	Iosive limits Not available. Not available. 16.3 mm Hg 1.5 Air=1
Upper/lower flammability or exp Explosive limit - lower (%) Explosive limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies)	Iosive limits Not available. Not available. 16.3 mm Hg 1.5 Air=1 1.057 at 77°F
Upper/lower flammability or exp Explosive limit - lower (%) Explosive limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Solubility (water) Partition coefficient	Iosive limits Not available. Not available. 16.3 mm Hg 1.5 Air=1 1.057 at 77°F 100 % Complete

Decomposition temperature	Not available
Viscosity	Not available
Other information	
Density	8.80 lb/gal
Percent volatile	81 - 86 %
VOC (Weight %)	26 % Concentrate

10. Stability and reactivity

Reactivity	Reacts violently with strong acids. This product may react with oxidizing agents.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Do not mix with other chemicals. Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents. Oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.	
Skin contact	contact Causes severe skin burns. Harmful in contact with skin.	
	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.	
	Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.	
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. May cause respiratory irritation.	

Information on toxicological effects

Acute toxicity

In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful in contact with skin. May cause respiratory irritation.

Product	Species	Test Results
SUPER STRIP		
Acute		
Dermal		
LD50	Rabbit	12713.6748 ml/kg estimated
		1989.2904 mg/kg estimated
Inhalation		
LC50	Guinea pig	6135135 ppm, 6 Hours
	Mouse	319672.125 mg/l, 4 Hours
		3500 ppm, 7 Hours estimated
	Rat	2250 ppm, 4 Hours estimated
Oral		
LD50	Guinea pig	5.9992 g/kg estimated
	Mouse	5.9752 g/kg estimated
	Rabbit	1.6 g/kg estimated
	Rat	2288.3491 mg/kg estimated

Components	Species	Test Results	
Ethylene glycol monobutyl ether (C	CAS 111-76-2)		
Acute			
Dermal		100	
LD50	Rabbit	400 mg/kg	
Inhalation LC50	Mouse	700 ppm 7 Hours	
2030		700 ppm, 7 Hours	
	Rat	450 ppm, 4 Hours	
Oral LD50	Guinea pig	1.2 g/kg	
2000	Mouse	1.2 g/kg	
	Rabbit	0.32 g/kg	
	Rat	560 mg/kg	
Other	Nat	Soo mg/kg	
LD50	Mouse	1130 mg/kg	
	Rabbit	280 mg/kg	
	Rat	340 mg/kg	
POTASSIUM HYDROXIDE (CAS		e të nightë	
Oral			
LD50	Rat	273 mg/kg	
* Estimates for product may be	e based on additional component data not	shown	
Skin corrosion/irritation	Causes severe skin burns and eye dama		
Serious eye damage/eye irritation	Causes serious eye damage.		
Respiratory or skin sensitization	I		
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	This product is not expected to cause ski		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	This product is not considered to be a ca	rcinogen by IARC, ACGIH, NTP, or OSHA.	
• •	Evaluation of Carcinogenicity		
Ethylene glycol monobuty US. OSHA Specifically Regu Not listed.	d ether (CAS 111-76-2) 3 Not cla Ilated Substances (29 CFR 1910.1001-10	ssifiable as to carcinogenicity to humans. 50)	
	This product is not expected to cause rep	productive or developmental effects.	
Reproductive toxicity	May cause respiratory irritation.		
Reproductive toxicity Specific target organ toxicity - single exposure	May cause respiratory irritation.		
Specific target organ toxicity - single exposure Specific target organ toxicity -	May cause respiratory irritation.		
Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure			
Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard	Not classified.	. Prolonged inhalation may be harmful.	
Specific target organ toxicity -	Not classified. Not an aspiration hazard. May be harmful if absorbed through skin.	igh the skin in toxic amounts if contact is repeated and	

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		Species	Test Results	
SUPER STRIP				
Aquatic				
Crustacea E	EC50	Daphnia	62896.4922 mg/l, 48 hours estimated	
Fish L	_C50	Fish	2333.5327 mg/l, 96 hours estimated	
Components		Species	Test Results	
Ethanol, 2-amino- (CAS 141-43	3-5)			
Aquatic				
-	_C50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	114 - 196 mg/l, 96 hours	
Ethylene glycol monobutyl ethe	er (CAS 111-76	-2)		
Aquatic	,	,		
-	_C50	Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours	
POTASSIUM HYDROXIDE (C/				
Aquatic				
-	_C50	Western mosquitofish (Gambusia affinis)	80 mg/l, 96 hours	
		······································		
* Estimates for product may be	based on addi	tional component data not shown.		
ersistence and degradability	No data is ava	ilable on the degradability of this product.		
oaccumulative potential				
Partition coefficient n-octand	ol / water (log k	(ow)		
Ethanol, 2-amino-		-1.31		
Ethylene glycol monobutyl ethe	er	0.83		
obility in soil	No data available.			
her 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.			
3. Disposal consideration	S			
sposal 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.			
cal disposal regulations	Dispose in acc	cordance with all applicable regulations.		
azardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.			
aste from residues / unused oducts	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).			
ontaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container emptied.			
4. Transport information				
-				
OT UN number	NA1760			
UN number UN proper shipping name	NA1760 Compound, Cleaning Liquid, (Potassium Hydroxide, Monoethanolamine)			
Transport hazard class(es)	Compound, Cleaning Liquid, (Potassium Hydroxide, Monoethanolamine)			
Class	8			
Subsidiary risk	-			
Label(s)	8			
Packing group	II			
		structions, SDS and emergency procedure		



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

Listed.

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)

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

Hazard categories

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

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100) Not listed.

US. Massachusetts RTK - Substance List

Ethanol, 2-amino- (CAS 141-43-5) Ethylene glycol monobutyl ether (CAS 111-76-2) POTASSIUM HYDROXIDE (CAS 1310-58-3)

US. New Jersey Worker and Community Right-to-Know Act

Ethanol, 2-amino- (CAS 141-43-5) Ethylene glycol monobutyl ether (CAS 111-76-2) POTASSIUM HYDROXIDE (CAS 1310-58-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Ethanol, 2-amino- (CAS 141-43-5) Ethylene glycol monobutyl ether (CAS 111-76-2) POTASSIUM HYDROXIDE (CAS 1310-58-3)

US. Rhode Island RTK

POTASSIUM HYDROXIDE (CAS 1310-58-3)

US. California Proposition 65

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

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*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	11-17-2014
Version #	01
HMIS® ratings	Health: 3 Flammability: 0 Physical hazard: 0
Disclaimer	HILLYARD cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.