HILLYARD The Cleaning Resource*

SAFETY DATA SHEET

1. Identification

Product identifier ARSENAL STRIPPER

Other means of identification

SDS number 538N-14A
Product code HIL00826
Recommended use Stripper

Recommended restrictions For Labeled Use Only **Manufacturer/Importer/Supplier/Distributor information**

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 hazardsFlammable liquidsCategory 4Health hazardsAcute toxicity, dermalCategory 4Acute toxicity, inhalationCategory 4Skin corrosion/irritationCategory 1Serious eye damage/eye irritationCategory 1Specific target organ toxicity, repeatedCategory 1

exposure

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Combustible liquid. Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns

and eye damage. Causes serious eye damage. Harmful if inhaled. May cause respiratory irritation. Harmful to aquatic life. May cause long lasting harmful effects to aquatic life.

Category 4

HIL00826 Version #: 02 Revision date: 03-05-2019 Issue date: 12-20-2014

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe mist or

vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective

gloves/protective clothing/eye protection/face protection.

If swallowed: Do not induce vomiting. Drink large quantities of water. Call a physician Response

> immediately. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Take off contaminated clothing and wash

before reuse. In case of fire: Use appropriate media to extinguish.

Store in a well-ventilated place. Keep cool. Store locked up. Storage

Disposal Buyer assumes all risk and liability associated with disposal of this product (original concentration

or dilution) in violation of applicable law. Waste from normal use may be sewered to a

public-owned treatment works in compliance with applicable federal, state and local requirements.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Butoxyethanol		111-76-2	50 - < 60
Benzyl Alcohol		100-51-6	20 - < 30
Ethanol, 2-amino-		141-43-5	10 - < 20
Other components below reportable levels			3 - < 5

^{*}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. Oxygen or

artificial respiration if needed. 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 physician or

poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Call a physician or poison control center immediately. Rinse mouth thoroughly. Drink plenty of Ingestion water. Never give anything by mouth to a victim who is unconscious or is having convulsions. 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. Headache. Nausea, vomiting. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Irritation of nose and throat.

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water

Indication of immediate medical attention and special treatment needed

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 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 Unsuitable extinguishing media

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. 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

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Material name: ARSENAL STRIPPER HIL00826 Version #: 02 Revision date: 03-05-2019 Issue date: 12-20-2014 Use standard firefighting procedures and consider the hazards of other involved materials.

Combustible liquid.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

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. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. 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.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. 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. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value	
Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3	
		50 ppm	
Ethanol, 2-amino- (CAS 141-43-5)	PEL	6 mg/m3	
		3 ppm	
US. ACGIH Threshold Limit Value	es		
Components	Туре	Value	
Butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
Ethanol, 2-amino- (CAS 141-43-5)	STEL	6 ppm	
	TWA	3 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Type	Value	
Butoxyethanol (CAS 111-76-2)	TWA	24 mg/m3	

Material name: ARSENAL STRIPPER

SDS US

HIL00826 Version #: 02 Revision date: 03-05-2019 Issue date: 12-20-2014

Components	Туре	Value	
		5 ppm	
Ethanol, 2-amino- (CAS 141-43-5)	STEL	15 mg/m3	
		6 ppm	
	TWA	8 mg/m3	
		3 ppm	
US. Workplace Environmental E	xposure Level (WEEL) Guides		
Components	Туре	Value	
Benzyl Alcohol (CAS 100-51-6)	TWA	44.2 mg/m3	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA),	Creatinine in urine	*
		with hydrolysis		

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

Exposure guidelines

US - California OELs: Skin designation

Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Butoxyethanol (CAS 111-76-2) Skin designation applies.

US - Tennessee OELs: Skin designation

Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

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

Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) 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.

10 ppm

Individual protection measures, such as personal protective equipment

Eye/face protection Do not get in eyes. Chemical goggles are recommended.

Skin protection

Hand protection Chemical resistant gloves. Rubber gloves.

Other Do not get this material in contact with skin. Wear appropriate chemical resistant clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not

been established), an approved respirator must be worn.

Thermal hazards None known.

General hygiene considerations

When using do not smoke. 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, colorless liquid

Physical state Liquid.
Form Liquid.

Color Clear colorless or nearly colorless

Odor Solvent odor

Material name: ARSENAL STRIPPER

Odor threshold Not available 11.00 - 12.00 pН

Melting point/freezing point Not applicable / Not available

Initial boiling point and boiling

range

250 °F (121.11 °C)

162.0 °F (72.2 °C) Tag Closed Cup Flash point

Evaporation rate < 1 (ethyl ether = 1)

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Not available. Explosive limit - lower (%)

Explosive limit - upper (%) Not available. 0.49 mm Ha Vapor pressure

3.6 Vapor density 0.96 Relative density

Solubility(ies)

Appreciable Solubility (water) **Partition coefficient** Not available

(n-octanol/water)

Not available **Auto-ignition temperature** Not available **Decomposition temperature Viscosity** Not available

Other information

Density 8.05 lb/gal > 98 % Percent volatile

98.65 % US EPA VOC VOC

68.65 CARB VOC

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Strong acids. Strong oxidizing agents. Incompatible materials

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Harmful if inhaled.

Skin contact Causes severe skin burns. Harmful in contact with skin.

Butoxyethanol 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. Headache. Nausea, vomiting. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Permanent eye damage including blindness could result. Irritation of nose and throat.

Information on toxicological effects

Acute toxicity Harmful if inhaled. Harmful in contact with skin.

Product Species Test Results

ARSENAL STRIPPER

Acute

Acute Oral

LD50 Dog 18770 g/kg

Components Species Test Results

Ethanol, 2-amino- (CAS 141-43-5)

Acute Oral

LD50 Rat 10.2 g/kg

Serious eye damage/eye

Causes serious eye damage.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo 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 carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

Butoxyethanol 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.

12. Ecological information

Ecotoxicity Harmful to aquatic life. May cause long lasting harmful effects to aquatic life.

Product	Species Test Results		Test Results
ARSENAL STRIPPER			
Aquatic			
Crustacea	EC50	Daphnia	190.189 mg/l, 48 hours estimated
Fish	LC50	Fish	182.0241 mg/l, 96 hours estimated

Material name: ARSENAL STRIPPER SDS US

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

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Components **Species Test Results**

Ethanol, 2-amino- (CAS 141-43-5)

Aquatic

Fish LC50 Rainbow trout.donaldson trout 114 - 196 ma/l. 96 hours

(Oncorhynchus mykiss)

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

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethanol. 2-amino--1.31

Mobility in soil No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

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. Do not

> contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Dispose in accordance with all applicable regulations. Local disposal 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). Waste from normal product use may be sewered to a public owned treatment works (POTW) in compliance with applicable Federal, State, and local pretreatment

requirements.

Not established.

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information

DOT

UN number NA1760

UN proper shipping name Transport hazard class(es) Compounds, Cleaning Liquid, (Monoethanolamine)

Class 8 Subsidiary risk Label(s) 8 П

Packing group

Special precautions for user Not available. B2, IB2, N37, T11 Special provisions

Packaging exceptions 154 202 Packaging non bulk Packaging bulk 242

Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

DOT



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.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard categories

Flammable (gases, aerosols, liquids, or solids)

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

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.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Butoxyethanol (CAS 111-76-2)

International Inventories

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)YesCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

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

Issue date 12-20-2014 **Revision date** 03-05-2019

Version # 02

HMIS® ratings Health: 3*

Flammability: 2 Physical hazard: 0

Material name: ARSENAL STRIPPER

^{*}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).

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

Product and Company Identification: Alternate Trade Names

Identification: Recommended restrictions

Composition / Information on Ingredients: Disclosure Overrides

Physical & Chemical Properties: Multiple Properties

Toxicological information: Chronic effects Toxicological information: Skin contact HazReg Data: International Inventories

SDS US