

## 1. Identification

**Product identifier** ASSAULT

**Other means of identification**

**SDS number** 538N-06A

**Product code** HIL00149

**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** Skin corrosion/irritation Category 1  
Serious eye damage/eye irritation Category 1

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage.

**Precautionary statement**

**Prevention** Do not breathe mist or vapor. Use With Adequate Ventilation. Wash thoroughly after handling. 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. Wash contaminated clothing before reuse.

**Storage** Store locked up.

**Disposal** Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law 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 | %         |
|------------------------------------------|--------------------------|------------|-----------|
| Ethylene Glycol Monophenyl Ether         |                          | 122-99-6   | 5 - < 10  |
| Ethanol, 2-amino-                        |                          | 141-43-5   | 3 - < 5   |
| 1-Butoxy-2-propanol                      |                          | 5131-66-8  | 1 - < 3   |
| Other components below reportable levels |                          |            | 80 - < 90 |

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

### 4. First-aid measures

|                                                                               |                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                                             | Move to fresh air. Call a physician if symptoms develop or persist.                                                                                                                                                                                                                                          |
| <b>Skin contact</b>                                                           | 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.                                                                                 |
| <b>Eye contact</b>                                                            | Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. 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.        |
| <b>Ingestion</b>                                                              | 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.                                                                                                                            |
| <b>Most important symptoms/effects, acute and delayed</b>                     | 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.                                                                                              |
| <b>Indication of immediate medical attention and special treatment needed</b> | 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 under observation. Symptoms may be delayed. |
| <b>General information</b>                                                    | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.                                                                                                                                                                                             |

### 5. Fire-fighting measures

|                                                                      |                                                                                               |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).                                   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| <b>Specific hazards arising from the chemical</b>                    | During fire, gases hazardous to health may be formed.                                         |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk.                                 |
| <b>Specific methods</b>                                              | Use standard firefighting procedures and consider the hazards of other involved materials.    |
| <b>General fire hazards</b>                                          | No unusual fire or explosion hazards noted.                                                   |

### 6. Accidental release measures

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures</b> | 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.                                                                                                                                       |
| <b>Methods and materials for containment and cleaning up</b>               | <p>This product is miscible in water.</p> <p>Large Spills: Stop the flow of material, if this is without risk. 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.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p> |
| <b>Environmental precautions</b>                                           | 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. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

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                       | Type | Value               |
|----------------------------------|------|---------------------|
| Ethanol, 2-amino- (CAS 141-43-5) | PEL  | 6 mg/m <sup>3</sup> |
|                                  |      | 3 ppm               |

#### US. ACGIH Threshold Limit Values

| Components                       | Type | Value |
|----------------------------------|------|-------|
| Ethanol, 2-amino- (CAS 141-43-5) | STEL | 6 ppm |
|                                  | TWA  | 3 ppm |

#### US. NIOSH: Pocket Guide to Chemical Hazards

| Components                       | Type | Value                        |
|----------------------------------|------|------------------------------|
| Ethanol, 2-amino- (CAS 141-43-5) | STEL | 15 mg/m <sup>3</sup>         |
|                                  |      | 6 ppm                        |
|                                  | TWA  | 8 mg/m <sup>3</sup><br>3 ppm |

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### 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.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Chemical goggles are recommended.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves.

##### Other

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

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, light amber liquid

#### Physical state

Liquid.

#### Form

Liquid.

#### Color

Light Amber

### Odor

Mild solvent odor

### Odor threshold

Not available

### pH

12 - 13

### Melting point/freezing point

Not applicable / Not available

|                                                     |                                       |
|-----------------------------------------------------|---------------------------------------|
| <b>Initial boiling point and boiling range</b>      | 208 °F (97.78 °C)                     |
| <b>Flash point</b>                                  | > 200.0 °F (> 93.3 °C) Tag Closed Cup |
| <b>Evaporation rate</b>                             | < 1 Ethyl ether = 1                   |
| <b>Flammability (solid, gas)</b>                    | Not available.                        |
| <b>Upper/lower flammability or explosive limits</b> |                                       |
| <b>Explosive limit - lower (%)</b>                  | Not available.                        |
| <b>Explosive limit - upper (%)</b>                  | Not available.                        |
| <b>Vapor pressure</b>                               | 17 mm Hg                              |
| <b>Vapor density</b>                                | 1 Air=1                               |
| <b>Relative density</b>                             | 1.03 at 77°F                          |
| <b>Solubility(ies)</b>                              |                                       |
| <b>Solubility (water)</b>                           | Complete                              |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available                         |
| <b>Auto-ignition temperature</b>                    | Not available                         |
| <b>Decomposition temperature</b>                    | Not available                         |
| <b>Viscosity</b>                                    | Not available                         |
| <b>Other information</b>                            |                                       |
| <b>Density</b>                                      | 8.58 lb/gal                           |
| <b>Percent volatile</b>                             | 94.5 - 95.5 %                         |
| <b>VOC (Weight %)</b>                               | 12 % EPA VOC<br>5.75 % CARB VOC       |

## 10. Stability and reactivity

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

## 11. Toxicological information

### Information on likely routes of exposure

|                                                                                     |                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                                                   | May cause irritation to the respiratory system. Prolonged inhalation may be harmful.                                                                                                                            |
| <b>Skin contact</b>                                                                 | Causes severe skin burns.<br><br>Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.                                                              |
| <b>Eye contact</b>                                                                  | Causes serious eye damage.                                                                                                                                                                                      |
| <b>Ingestion</b>                                                                    | Causes digestive tract burns.                                                                                                                                                                                   |
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | 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

| Product                                         | Species    | Test Results               |
|-------------------------------------------------|------------|----------------------------|
| ASSAULT                                         |            |                            |
| <b>Acute</b>                                    |            |                            |
| <i>Dermal</i>                                   |            |                            |
| LD50                                            | Rabbit     | 9189.7217 ml/kg estimated  |
| <i>Oral</i>                                     |            |                            |
| LD50                                            | Guinea pig | 9095.6074 g/kg estimated   |
|                                                 | Mouse      | 23739.8379 g/kg estimated  |
|                                                 | Rat        | 99428.9453 mg/kg estimated |
|                                                 |            | 24065.041 ml/kg estimated  |
| Components                                      | Species    | Test Results               |
| Ethanol, 2-amino- (CAS 141-43-5)                |            |                            |
| <b>Acute</b>                                    |            |                            |
| <i>Dermal</i>                                   |            |                            |
| LD50                                            | Rabbit     | 1025 mg/kg                 |
| <i>Oral</i>                                     |            |                            |
| LD50                                            | Guinea pig | 620 mg/kg                  |
|                                                 | Mouse      | 700 mg/kg                  |
|                                                 | Rat        | 10.2 g/kg                  |
| Ethylene Glycol Monophenyl Ether (CAS 122-99-6) |            |                            |
| <b>Acute</b>                                    |            |                            |
| <i>Oral</i>                                     |            |                            |
| LD50                                            | Mouse      | 16500 mg/kg                |
|                                                 | Rat        | 1260 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 sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

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

**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 carcinogen by IARC, ACGIH, NTP, or OSHA.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Reproductive toxicity** Not applicable.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Prolonged inhalation may be harmful.

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

Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

## 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                      |
|-------------------------------------------------|------|--------------------------------------------------------|-----------------------------------|
| ASSAULT                                         |      |                                                        |                                   |
| <b>Aquatic</b>                                  |      |                                                        |                                   |
| Crustacea                                       | EC50 | Daphnia                                                | 425.5031 mg/l, 48 hours estimated |
| Fish                                            | LC50 | Fish                                                   | 787.6786 mg/l, 96 hours estimated |
| Components                                      |      | Species                                                | Test Results                      |
| Ethanol, 2-amino- (CAS 141-43-5)                |      |                                                        |                                   |
| <b>Aquatic</b>                                  |      |                                                        |                                   |
| Fish                                            | LC50 | Rainbow trout,donaldson trout<br>(Oncorhynchus mykiss) | 114 - 196 mg/l, 96 hours          |
| Ethylene Glycol Monophenyl Ether (CAS 122-99-6) |      |                                                        |                                   |
| <b>Aquatic</b>                                  |      |                                                        |                                   |
| Fish                                            | LC50 | Fathead minnow (Pimephales promelas)                   | 337 - 352 mg/l, 96 hours          |

\* 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 |
| Ethylene Glycol Monophenyl Ether | 1.16  |

**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

|                                              |                                                                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal instructions</b>                 | 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.                         |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.                                                                                                                                                           |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.                                                                                                   |
| <b>Waste from residues / unused products</b> | 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). |
| <b>Contaminated packaging</b>                | 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 is emptied.       |

### 14. Transport information

#### DOT

|                                                                     |                                                                         |
|---------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>UN number</b>                                                    | UN1760                                                                  |
| <b>UN proper shipping name</b>                                      | Corrosive liquid, n.o.s. (Sodium Metasilicate)                          |
| <b>Transport hazard class(es)</b>                                   |                                                                         |
| <b>Class</b>                                                        | 8                                                                       |
| <b>Subsidiary risk</b>                                              | -                                                                       |
| <b>Label(s)</b>                                                     | Corrosive                                                               |
| <b>Packing group</b>                                                | III                                                                     |
| <b>Special precautions for user</b>                                 | Read safety instructions, SDS and emergency procedures before handling. |
| PACKAGES 1 GALLON AND SMALLER ARE SHIPPED LIMITED QUANTITY OR ORM-D |                                                                         |

#### IATA

|                                   |                                                        |
|-----------------------------------|--------------------------------------------------------|
| <b>UN number</b>                  | UN1760                                                 |
| <b>UN proper shipping name</b>    | UN1760 Corrosive Liquid, n.o.s., (Sodium Metasilicate) |
| <b>Transport hazard class(es)</b> |                                                        |
| <b>Class</b>                      | 8                                                      |
| <b>Subsidiary risk</b>            | -                                                      |
| <b>Label(s)</b>                   | 8                                                      |
| <b>Packing group</b>              | III                                                    |
| <b>Environmental hazards</b>      | No.                                                    |
| <b>ERG Code</b>                   | 154                                                    |

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

**Other information**

**Passenger and cargo aircraft** Allowed.

**Cargo aircraft only** Allowed.

**IMDG**

**UN number** UN1760

**UN proper shipping name** UN1760 Corrosive Liquid, n.o.s., (Sodium Metasilicate)

**Transport hazard class(es)**

**Class** 8

**Subsidiary risk** -

**Label(s)** 8

**Packing group** III

**Environmental hazards**

**Marine pollutant** No.

**EmS** F-A, S-B

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

**DOT**



**IATA; IMDG**



## 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.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**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 chemical** No**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Safe Drinking Water Act (SDWA)** Not regulated.**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)

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

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

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

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

**US. Rhode Island RTK**

Not regulated.

**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                                | On inventory (yes/no)* |
|-----------------------------|-----------------------------------------------|------------------------|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes                    |

\*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** 01-08-2015**Version #** 01**HMIS® ratings** Health: 3  
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.