1. Identification

Product identifier: CLEAN ACTION II

Other means of identification:

- SDS number: 576N-93A
- Product code: HIL00902
- Recommended use: Carpet Cleaner
- Recommended restrictions: None known.

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 hazards: Flammable liquids - Category 4

Health hazards: Serious eye damage/eye irritation - Category 2

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:

- Signal word: Warning
- Hazard statement: Combustible liquid. Causes serious eye irritation.
- Precautionary statement:
  - Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear eye/face protection. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.
  - Response: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.
  - Storage: Store in a well-ventilated place. Keep cool.
  - 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 and Synonyms

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol Propyl Ether</td>
<td>1569-01-3</td>
<td>3 - &lt; 5</td>
<td></td>
</tr>
<tr>
<td>Alcohols (C12-15 ln, Saturated Ethoxylate)</td>
<td>68131-39-5</td>
<td>1 - &lt; 3</td>
<td></td>
</tr>
<tr>
<td>Sodium lauryl sulfate</td>
<td>151-21-3</td>
<td>1 - &lt; 3</td>
<td></td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td>90 - 100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage 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**
Not available.

**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. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed**
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Indication of immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically. 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.

### 5. Fire-fighting Measures

**Suitable extinguishing media**
Water fog. Foam. 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**
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.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
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 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**
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.

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. 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. 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
Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
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. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits
No exposure limits noted for ingredient(s).

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. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection
Chemical safety goggles when working with concentrate.

Skin protection
Hand protection
Not normally needed.

Other
Not normally needed.

Respiratory protection
No personal respiratory protective equipment normally required.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

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
White Liquid

Physical state
Liquid.

Form
Liquid.

Color
White

Odor
Non-objectional odor

Odor threshold
Not available

pH
9 - 10 Concentrate

Melting point/freezing point
Not applicable / Not available

Initial boiling point and boiling range
210 °F (98.89 °C)

Flash point
161.0 °F (71.7 °C) Tag Closed Cup

Evaporation rate
< 1 (ethyl ether = 1)

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

Vapor pressure
17.46 mm Hg

Vapor density
0.8059 Air =1

Relative density
1.004 at 77°F

Solubility(ies)

Solubility (water)
Complete

Partition coefficient (n-octanol/water)
Not available

Auto-ignition temperature
Not available

Decomposition temperature
Not available

Viscosity
Not available
Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>8.33 lb/gal</td>
</tr>
<tr>
<td>Percent volatile</td>
<td>96 - 97 %</td>
</tr>
<tr>
<td>VOC (Weight %)</td>
<td>5 % Concentrate</td>
</tr>
</tbody>
</table>

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
Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Alkaline metals.

Hazardous decomposition products
Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure

Inhalation
Prolonged inhalation may be harmful.

Skin contact
May be irritating to the skin.

Eye contact
Causes serious eye irritation.

Ingestion
Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity
May cause respiratory irritation.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEAN ACTION II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>64935.0664 ml/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>1482.8184 ml/kg estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1405.7124 g/kg estimated</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>51750 mg/l, 4 Hours estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50000 mg/l, 2 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>27272.7422 mg/l, 0.5 Hours estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27272.7422 mg/l, 1 Hours estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27272.7422 mg/l, 2 Hours estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27272.7422 mg/l, 4 Hours estimated</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>5194.8052 g/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>8670.2578 g/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>1140.6753 ml/kg estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1058.7937 g/kg estimated</td>
</tr>
</tbody>
</table>

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol Propyl Ether (CAS 1569-01-3)</td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>4.29 ml/kg</td>
</tr>
</tbody>
</table>

Material name: CLEAN ACTION II
HIL00902 Version #: 02 Revision date: 09-10-2015 Issue date: 10-03-2014
**Components**  
**Species**  
**Test Results**

<table>
<thead>
<tr>
<th>Oral</th>
<th>Rat</th>
<th>3.55 g/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
<td></td>
<td>2.83 ml/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.8 g/kg</td>
</tr>
</tbody>
</table>

**Sodium lauryl sulfate (CAS 151-21-3)**

<table>
<thead>
<tr>
<th>Acute</th>
<th>Oral</th>
<th>Rat</th>
<th>1288 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**Skin corrosion/irritation**  
Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**  
Causes serious eye irritation.

**Respiratory or skin sensitization**  
**Respiratory sensitization**  
Not a respiratory sensitizer.

**Skin sensitization**  
Not available.

**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.

Not listed.

**Reproductive toxicity**  
This 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**  
Prolonged inhalation may be harmful.

**Chronic effects**  
Prolonged inhalation may be harmful.

**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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEAN ACTION II</td>
<td>Aquatic</td>
<td><strong>Crustacea</strong> EC50 Daphnia 2212.5488 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Fish</strong> LC50 Fish 3233.1633 mg/l, 96 hours estimated</td>
</tr>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>Alcohol (C12-15 In, Saturated) Ethoxylate (CAS 68131-39-5)</td>
<td>Aquatic</td>
<td><strong>Crustacea</strong> EC50 Water flea (Ceriodaphnia dubia) 0.37 - 0.43 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Fish</strong> LC50 Channel catfish (Ictalurus punctatus) 1.04 - 1.39 mg/l, 96 hours</td>
</tr>
<tr>
<td>Sodium lauryl sulfate (CAS 151-21-3)</td>
<td>Aquatic</td>
<td><strong>Crustacea</strong> EC50 Water flea (Daphnia obtusa) 9.2 - 10.4 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Fish</strong> LC50 Carp, hawk fish (Cirrhinus mrigala) 1.36 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

* 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)**  
Propylene Glycol Propyl Ether 0.621
Partition coefficient n-octanol / water (log Kow)  
Sodium lauryl sulfate 1.6

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. Do not discharge into drains, water courses or onto the ground. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

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  
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. Dispose of in accordance with local regulations.

Contaminated packaging  
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information

DOT  
Not regulated as dangerous goods.

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 - Yes
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  
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act  
Not listed.
US. Pennsylvania Worker and Community Right-to-Know Law  
Not listed.

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. WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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: 10-03-2014  
Revision date: 09-10-2015  
Version #: 02  
HMIS® ratings:  
Health: 2  
Flammability: 2  
Physical hazard: 0

Disclaimer  
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Revision Information  
This document has undergone significant changes and should be reviewed in its entirety.