HILLYARD INDUSTRIES
SAFETY DATA SHEET

1. Identification
Product Identifier: HILLYARD #96 RE-JUV-NAL HBV
Application or recommended use: Concentrated hard surface disinfectant cleaner
Restrictions on use: Do not use in any fashion not specified on the product label.
Manufacturer / supplier: Hillyard Industries
302 N. Fourth Street
St. Joseph, MO 64501 USA

2. Hazards Identification
GHS Classification: Classification of this mixture in accordance with paragraph (d) of §1910.1200.
Skin Corrosion/Irritation - Category 1C
Eye Damage/Irritation - Category 1

Labeling:

Symbol:  
Signal word: DANGER
Hazard statements: Causes severe skin burns and serious eye damage.
Precautionary statements: Do not breathe mist/vapors/spray.
Wash hands, face and any skin contact thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
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 or doctor/physician.
Store locked up.
Dispose of contents/container to an approved disposal facility.

Other Hazards: None known

3. Composition / Information on Ingredients
Chemical characterization: Mixture of water, detergents, germicides and auxiliary agents.
Hazardous ingredients: The exact percentage of composition has been withheld as a trade secret.
3.0% Nonylphenol ethoxylate
2.37% C12-18 Alkyl dimethylbenzyl ammonium chlorides
2.37% C12-18 Alkyl dimethylbenzyl ammonium chlorides
2.0% Sodium carbonate
Other ingredients (> 1%):
> 85% Water

CAS 9017-45-9, EINECS/ELINCS N/A
CAS 68391-01-5, EINECS/ELINCS 269-919-4
CAS 68956-79-6, EINECS/ELINCS N/A
CAS 497-19-8, EINECS/ELINCS 207-838-8
CAS 7732-18-5, EINECS/ELINCS 231-791-2

4. First-Aid Measures
Symptoms: Burning or irritation of affected areas. Causes severe skin burns and serious eye damage.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth to an unconscious person. If respiratory irritation, dizziness, or unconsciousness occurs, seek immediate medical assistance.
Skin (Hair) Contact: Remove contaminated clothing and wash before reuse. Wash contaminated area with soap and water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
4. First-Aid Measures (cont.)
Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to a person who is unconscious or convulsing. If vomiting occurs, keep head below hips to reduce risk of aspiration. Probable mucosal damage may contraindicate the use of gastric lavage.
Note to Physician: Treat exposed patients symptomatically.

5. Fire-Fighting Measures
Suitable Extinguishing Media: Not applicable. Product is not a fire hazard.
Unsuitable Extinguishing Media: High pressure water jet. Specific hazards in case of fire: None known.
Special Fire Fighting Precautions: Fire fighters should wear appropriate protective equipment, including self-contained breathing apparatus and impervious clothing.

6. Accidental Release Measures
Emergency Procedures: Depending on the extent of release, consider the need for restriction of access to spill area.
Personal Precautions: Do not eat, drink or smoke during clean up. Wear protective clothing, eye protection and impervious gloves (e.g. neoprene). Wash thoroughly after clean up.
Environmental Precautions: Prevent spills from entering storm sewers/drains or contact with soil.
Clean up Methods: Small spills may be wiped up and rinsed with water. For larger spills, contain spill with inert material (sand, clay). Transfer material to labeled containers for recovery or proper disposal. After removal, flush area with water. Follow good industrial hygiene practices.

7. Handling and Storage
Precautions for Safe Handling: Read label before use. Avoid contact with skin or eyes. Do not breathe mist/vapors. Wash hands, face and any skin contact thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, protective clothing, eye protection, face protection. Use product only according to label directions. If unsure about safe use, contact your supervisor.
Conditions for Safe Storage: Keep out of reach of children. Do not contaminate water, food or feed by storage and disposal. Store in tightly closed, original container in a cool (10° - 30°C), dry area.
Incompatibility: Anionic detergents inactivate material.

8. Exposure Controls / Personal Protection
Components with occupational exposure limits: None
Engineering Controls: Proper ventilation in accordance with good industrial hygiene should be provided.
Personal Protective Equipment
Respiratory: Respiratory protection is not necessary under normal conditions of use.
Gloves: Use water impervious gloves (latex or neoprene rubber). No breakthrough time has been established.
Eye Protection: Chemical resistant goggles or face protection.
Other: Protective clothing (long sleeves, pants), eyewash, safety shower are always advisable when working with chemicals.

9. Physical and Chemical Properties
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>None</td>
</tr>
<tr>
<td>Odor</td>
<td>Lemon</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>212°F</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>32°F</td>
</tr>
<tr>
<td>pH (Neal)</td>
<td>11.5 - 12.5</td>
</tr>
<tr>
<td>pH (RTU)</td>
<td>10.5 - 12.0</td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.030</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Similar to water</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>None</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability Limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility (Water)</td>
<td>Complete</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Water thin</td>
</tr>
<tr>
<td>% VOC</td>
<td>&lt; 1 (Excluding exempt material)</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity
Reactivity: No specific reactivity test data is available for this mixture. Under normal conditions of storage and use, hazardous reactions are not expected. Incompatible materials: Oxidizers, anionic detergents.
Chemical stability: This product is stable at ambient temperatures and pressures.
Conditions to avoid: Temperatures above 50°C or below 10°C.
Hazardous decomposition products: None known.
11. Toxicological Information

Acute Toxicity: Toxicity data is not available for this mixture. Data below are estimates based on summation methods.

<table>
<thead>
<tr>
<th>Test</th>
<th>Results</th>
<th>Classification (A.0.4.1(c)) Basis (A.1.3.6.1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt; 2000mg/kg</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt; 2000mg/kg</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Inhalation</td>
<td>&gt; 20 mg/L</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Eye Damage/Irritation</td>
<td>Corrosion</td>
<td>Category I</td>
</tr>
<tr>
<td>Skin Damage/Irritation</td>
<td>Corrosion</td>
<td>Category 1C</td>
</tr>
</tbody>
</table>

Summary: Skin and eye contact are most likely routes of exposure. Exposure causes severe skin burns and serious eye damage.

Subchronic/Chronic Toxicity:

<table>
<thead>
<tr>
<th>Test</th>
<th>Results</th>
<th>Classification</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Sensitization</td>
<td>Not a sensitizer</td>
<td>Not applicable</td>
<td>Ingredient literature.</td>
</tr>
</tbody>
</table>

Summary: Repeated or prolonged contact causes skin burns and eye damage.

Carcinogens - Ingredients are not listed on the NTP Report on Carcinogens, IARC Monographs or by OSHA

Other data - No other toxicological information is available for this mixture.

12. Ecological Information

This material has not been tested for acute environmental effects.

Persistence and degradability: Material is not persistent. All organic components > 1% are inherently biodegradable.

Bio-accumulative potential: No evidence to suggest bio-accumulation will occur.

Mobility: Accidental spillage may lead to penetration of soil and groundwater.

13. Disposal Considerations

Do not contaminate water, food or feed by disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray, or mixture of rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the hazardous waste representative at the nearest EPA Regional Office for guidance. Container Disposal: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or if allowed by state and local authorities, burn. If burned, stay out of smoke. If container is one gallon or less, wrap empty container in plastic bag and discard in trash.

14. Transport Information

Proper Shipping Name: Not regulated

Shipping emergency phone: 800-424-9300

Transport hazard class: Not Applicable

Packing Group: Not Applicable

RQ - Not Applicable

Emergency Guide No.: Not Applicable

Marine Pollutant: No

15. Regulatory Information

Inventory status: All components are listed on TSCA(US), EINECS/ELINCS(EU), DSL(Canada), AICS(Australia).

FIFRA: This product is a U.S. EPA Registered pesticide. EPA Reg. No. 61178-1-1658, and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide products. The hazard information required on the pesticide label is reproduced here.

DANGER: Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Wear protective eyewear (goggles, face shield or safety glasses). Wear protective clothing and rubber gloves. Avoid contamination of food. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. Combustible. Do not use or store near heat or open flame. The pesticide label also includes other important information, including directions for use.

OSHA Hazard Communication Standard: This product meets the §1910.1200 definition of a "Hazardous Chemical".

Superfund Amendments and Reauthorization Act of 1986 Title III (EPCRA) Sections 311 and 312

Immediate (Acute) Health Hazard: Yes

Delayed (Chronic) Health Hazard: No

Fire Hazard: No

Reactive Hazard: No

Sudden Release of Pressure Hazard: No

Superfund Amendments and Reauthorization Act of 1986 Title III (EPCRA) Section 313

*Chemicals marked with an asterisk in "3. Composition/Information on Ingredients" are subject to reporting requirements for section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.
15. Regulatory Information (cont.)
Pennsylvania/New Jersey/Massachusetts Right to Know
See “3. Composition/Information on Ingredients” for hazardous and top five ingredients over 1% (w/w).

California Proposition 65: This product does not contain a listed substance known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

16. Other information
Date issued: 31.12.2014

Disclaimer: No representation or warranty, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, is made with respect to information concerning the product referred to in this document. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, it is impossible to foresee every health effect or exposure risk incurred by the use of this product. All chemicals present some degree of hazard and should be used with caution. The information and recommendations contained herein are presented in good faith. The user should review this information in conjunction with their knowledge of the application intended to determine the suitability of this product for such purpose. In no event will the supplier be responsible for any damages of any nature whatsoever, resulting from the use, reliance upon, or the misuse of this information. Furthermore, it is the direct responsibility of the user to comply with all applicable regulations governing the use and disposal of this material. Prepared by: R&D