

SAFETY DATA SHEET

1. Identification

Product identifier	RE-JUV-NAL (1:64)	
Other means of identification SDS number	587N-047C	
Product code	HIL00816RTU	
Product registration number	1839-169-1658	
Recommended use	Disinfectant/Cleaner	
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	(800) 365-1555 (Ext. 8206)
Fax	(816) 383-8406
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	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
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. CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

4. First-aid measures	
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
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).

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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.
Specific methods	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

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Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.	
Methods and materials for containment and cleaning up	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. 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 release to the environment.	
7. Handling and storage		

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 Precautions for safe handling
 Avoid prolonged exposure. Observe good industrial hygiene practices.

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

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation 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. General ventilation normally adequate.
Individual protection measures,	such as personal protective equipment
Eye/face protection	Where splashing of concentrate is a concern, use protective glasses with side shield
Skin protection Hand protection	Use protective gloves when dealing with the concentrate.
Other	Not normally needed.
Respiratory protection	Not normally required with adequate ventilation.
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 red liquid
Physical state	Liquid

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Physical state	Liquid.
Form	Liquid.
Color	Light red
Odor	Floral odor
Odor threshold	Not available.
рН	6.5 - 7.5
Melting point/freezing point	Not applicable / Not available
Initial boiling point and boiling range	207 °F (97.22 °C)
Flash point	Not available.
Evaporation rate	<1 Ethyl ether = 1
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp Explosive limit - lower (%)	losive limits Not applicable
Explosive limit - upper (%)	Not applicable
Vapor pressure	17.6 mm Hg
Vapor density	0.6 Air = 1
Relative density	1 at 77°F
Solubility(ies) Solubility (water)	100 % Complete
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information Density	8.33 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	>98 %

0.01 %

voc

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	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product may yield oxides of nitrogen and ammonia.

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	Direct contact with eyes may cause temporary irritation.
Ingestion	Ingestion of diluted material may cause gastrointestinal tract irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Product	Species	Test Results
RE-JUV-NAL (1:64)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	21557510 mg/kg
Inhalation		
LC50	Rat	1248375 mg/l, 4 Hours
Oral		
LD50	Rat	317344 mg/kg
Components	Species	Test Results

Didecyl dimethyl ammonium chloride (CAS 7173-51-5)

<u>Acute</u>			
Oral			
LD50	Rat	84 mg/kg	
Skin corrosion/irritation	Prolonged skin contact	nay cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.		
Respiratory or skin sensitizatio Respiratory sensitization	n Not a respiratory sensiti	zer.	
Skin sensitization	This product is not expe	cted 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	Not classifiable as to ca	rcinogenicity to humans.	
IARC Monographs. Overall	Evaluation of Carcinoge	nicity	
Not listed.			
OSHA Specifically Regulate	ed Substances (29 CFR 1	910.1001-1053)	
Not listed.			
US. National Toxicology Pro	ogram (NTP) Report on C	arcinogens	
Not listed.			

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.				
Specific target organ toxicity - single exposure	Not classified.	Not classified.			
Specific target organ toxicity - repeated exposure	Not classified.	Not classified.			
Aspiration hazard	Not an aspirat	tion hazard.			
Chronic effects	Prolonged inh	alation may be harmful.			
Further information	This product h	nas no known adverse effect on human he	alth.		
12. Ecological information	n				
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		
RE-JUV-NAL (1:64)					
Aquatic					
Crustacea	EC50	Daphnia	8224.377 mg/l, 48 hours		
Fish	LC50	Fish	3834.9241 mg/l, 96 hours		
Acute					
Crustacea	EC50	Daphnia	1078.0726 mg/l, 48 hours estimated		
Fish	LC50	Fish	0.1998 mg/l, 96 hours estimated		
Components		Species	Test Results		
Didecyl dimethyl ammonium o	chloride (CAS 71	173-51-5)			
Aquatic					
Acute					
Fish	LC50	White sturgeon (Acipenser transmontanus)	0.0001 - 0.001 mg/l, 96 hours		
Persistence and degradability	No data is ava	ailable on the degradability of this product.			
Bioaccumulative potential					
Mobility in soil	No data availa	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 consideratio	ons				
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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 ac	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	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.				
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.				
14. Transport information	1				
	NI-4 4 - 1-12 - 1				

Transport in bulk according toNot established.Annex II of MARPOL 73/78 andthe IBC Code

15. Regulatory information

15. Regulatory information	on		
US federal regulations		ot known to be a "Hazardous Chemical" as defined by the OSHA Hazard Standard, 29 CFR 1910.1200.	
Toxic Substances Control	Act (TSCA)	One or more components of the mixture are not on the TSCA 8(b) inver or are designated "inactive".	ntory
TSCA Section 12(b) Ex	port Notification (40 CFR 707, Subpt. D)	
Not regulated.			
CERCLA Hazardous Substa	ance List (40 CFR	302.4)	
Not listed.			
SARA 304 Emergency relea	ase notification		
Not regulated.			
OSHA Specifically Regulate	ed Substances (29) CFR 1910.1001-1053)	
Not listed.			
Superfund Amendments and Re		t of 1986 (SARA)	
SARA 302 Extremely hazar	dous substance		
Not listed.			
SARA 311/312 Hazardous chemical	No		
SARA 313 (TRI reporting) Not regulated.			
Other federal regulations			
Clean Air Act (CAA) Section	n 112 Hazardous A	Air Pollutants (HAPs) List	
Not regulated.			
Clean Air Act (CAA) Section	n 112(r) Accidenta	I Release Prevention (40 CFR 68.130)	
Not regulated.			
Safe Drinking Water Act (SDWA)	Contains compo	nent(s) regulated under the Safe Drinking Water Act.	
US state regulations			
California Proposition 65			
	any chemicals curre	nforcement Act of 1986 (Proposition 65): This material ently listed as carcinogens or reproductive toxins. For ca.gov.	
International Inventories			
Country(s) or region	Inventory name	On inventory (yes	;/ no) *
Canada	Domestic Substa	ances List (DSL)	Yes
Canada	Non-Domestic S	ubstances List (NDSL)	No
United States & Puerto Rico	Toxic Substance	s Control Act (TSCA) Inventory	Yes
		t comply with the inventory requirements administered by the governing country(s) product are not listed or exempt from listing on the inventory administered by the	

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

Issue date	09-20-2016
Revision date	01-21-2025
Version #	06
HMIS® ratings	Health: 1 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.
Povision information	Experience controls/personal protection: Eve/face protection

Revision information Expos

Exposure controls/personal protection: Eye/face protection