

**Section: 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : RESIN-RINSE® 7293

Other means of identification : Not applicable.

Recommended use : CONDENSATE POLISHER AMINE  
REGENERANT/CLEANER

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company  
1601 W. Diehl Road  
Naperville, Illinois 60563-1198  
USA  
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC


Issuing date : 01/23/2015

**Section: 2. HAZARDS IDENTIFICATION**

**GHS Classification**

Skin irritation : Category 2  
Eye irritation : Category 2A

**GHS Label element**

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : Causes skin irritation.  
Causes serious eye irritation.

Precautionary Statements : **Prevention:**  
Wash skin thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.  
**Response:**  
IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

Other hazards : None known.

**Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS**

# SAFETY DATA SHEET

## RESIN-RINSE® 7293

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Morpholine	110-91-8	5 - 10

### Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Get medical attention if irritation develops and persists.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

### Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during firefighting : Not flammable or combustible.

Hazardous combustion products : Carbon oxides

Special protective equipment for firefighters : Use personal protective equipment.

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

### Section: 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

# SAFETY DATA SHEET

## RESIN-RINSE® 7293

- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes. Wash hands thoroughly after handling. Use only with adequate ventilation.
- Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.
- Unsuitable material : not determined

### Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Morpholine	110-91-8	TWA	20 ppm	ACGIH
		TWA	20 ppm 70 mg/m <sup>3</sup>	NIOSH REL
		STEL	30 ppm 105 mg/m <sup>3</sup>	NIOSH REL
		TWA	20 ppm 70 mg/m <sup>3</sup>	OSHA Z1

- Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Personal protective equipment

- Eye protection : Safety glasses with side-shields
- Hand protection : Wear the following personal protective equipment:  
Standard glove type.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin protection : Wear suitable protective clothing.
- Respiratory protection : No personal respiratory protective equipment normally required.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.  
Wash face, hands and any exposed skin thoroughly after handling.

## SAFETY DATA SHEET

### RESIN-RINSE® 7293

#### Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Colour	: clear
Odour	: amine-like
Flash point	: > 100 °C Method: ASTM D 93, Tag closed cup
pH	: 8 - 10, 100 % (25 °C)Method: ASTM E 70
Odour Threshold	: no data available
Melting point/freezing point	: FREEZING POINT: -28.8 °C, ASTM D-1177
Initial boiling point and boiling range	: 100 °C Method: ASTM D 86
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: 1.22 - 1.28 (24 °C) ASTM D-1298
Density	: no data available
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition temperature	: no data available
Viscosity, dynamic	: 48 mPa.s (25 °C) Method: ASTM D 2983
Viscosity, kinematic	: no data available
VOC	: 3.40 % 41.94 g/l

#### Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Freezing temperatures.
Incompatible materials	: Contact with strong oxidizers (e.g. chlorine, peroxides, chromates,

# SAFETY DATA SHEET

## RESIN-RINSE® 7293

nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.  
Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors.

Hazardous decomposition products : Carbon oxides

### Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

#### Potential Health Effects

Eyes : Causes serious eye irritation.

Skin : Causes skin irritation.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

#### Experience with human exposure

Eye contact : Redness, Pain, Irritation

Skin contact : Redness, Irritation

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

#### Toxicity

##### Product

Acute oral toxicity : rat: 5,000 mg/kg  
Test substance: Product

Acute toxicity estimate : > 5,000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate : > 40 mg/l  
Exposure time: 4 h

Acute dermal toxicity : rabbit: 2,000 mg/kg  
Test substance: Product

Acute toxicity estimate : > 5,000 mg/kg

Skin corrosion/irritation : Species: Rabbit  
Result: 0.5  
Method: Draize Test  
Test substance:Product

## SAFETY DATA SHEET

### RESIN-RINSE® 7293

Serious eye damage/eye irritation	: Species: rabbit Result: 9.7 Method: Draize Test Test substance: Product
Respiratory or skin sensitization	: no data available
Carcinogenicity	: no data available
Reproductive effects	: no data available
Germ cell mutagenicity	: Mutagenicity tests on morpholine provided the following results: A bacterial mutagenicity (Ames) bioassay was negative; sister chromatid exchange transformation was positive; mouse lymphoma was weakly positive and rat hepatocyte/DNA repair was negative.
Teratogenicity	: no data available
STOT - single exposure	: no data available
STOT - repeated exposure	: no data available
Aspiration toxicity	: no data available

### Section: 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

#### Product

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout): 1,000 mg/l  
Exposure time: 96 hrs  
Test substance: Product

NOEC *Oncorhynchus mykiss* (rainbow trout): 180 mg/l  
Exposure time: 96 hrs  
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 *Daphnia magna* (Water flea): 830 mg/l  
Exposure time: 48 hrs  
Test substance: Product

NOEC *Daphnia magna* (Water flea): 100 mg/l  
Exposure time: 48 hrs  
Test substance: Product

#### Components

Toxicity to algae : Morpholine  
EC50 : 28 mg/l  
Exposure time: 96 h

#### Persistence and degradability

# SAFETY DATA SHEET

## RESIN-RINSE® 7293

Chemical Oxygen Demand (COD): 780,000 mg/l

### Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	:	<5%
Water	:	30 - 50%
Soil	:	50 - 70%

The portion in water is expected to be soluble or dispersible.

### Bioaccumulative potential

no data available

### Other information

no data available

## Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

### Land transport (DOT)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

### Air transport (IATA)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

### Sea transport (IMDG/IMO)

# SAFETY DATA SHEET

## RESIN-RINSE® 7293

Proper shipping name : PRODUCT IS NOT REGULATED DURING  
TRANSPORTATION

### Section: 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know Act

##### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### INTERNATIONAL CHEMICAL CONTROL LAWS :

##### TOXIC SUBSTANCES CONTROL ACT (TSCA)

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

##### CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

##### AUSTRALIA

This product contains a substance not found on the TSCA 8(b) Inventory List and can only be used under the TSCA 5(h)(3) Research Exemption.

##### CHINA

This product contains substance(s) which are not in compliance with the Provisions on the Environmental Administration of New Chemical Substances and may require additional review.

##### EUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

##### JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

##### KOREA

This product contains substance(s) which are not in compliance with the Toxic Chemical Control Law (TCCL) and may require additional review.



# SAFETY DATA SHEET

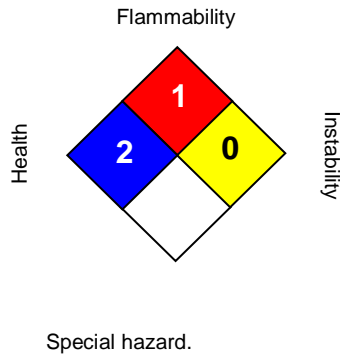
## RESIN-RINSE® 7293

PHILIPPINES

This product contains substance(s) which are not in compliance with the Republic Act 6969 (RA 6969) and may require additional review.

### Section: 16. OTHER INFORMATION

#### NFPA:



#### HMIS III:

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Revision Date : 01/23/2015  
Version Number : 1.0  
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.  
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