

**HARDENER HY 991 US**

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**SECTION 1. IDENTIFICATION**

Product name : HARDENER HY 991 US

**Manufacturer or supplier's details**

Company name of supplier : Huntsman Advanced Materials Americas LLC  
Address : P.O. Box 4980  
The Woodlands,  
TX 77387  
United States of America (USA)  
Telephone : Non-Emergency: (800) 257-5547  
E-mail address of person responsible for the SDS : MSDS@huntsman.com

Emergency telephone number : Chemtrec: (800) 424-9300 or (703) 527-3887

**Recommended use of the chemical and restrictions on use**

Recommended use : Hardener

**SECTION 2. HAZARDS IDENTIFICATION****GHS classification in accordance with 29 CFR 1910.1200**

Skin corrosion : Category 1C  
Serious eye damage : Category 1  
Skin sensitisation : Category 1  
Chronic aquatic toxicity : Category 2

**GHS label elements**

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/

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face protection.

**Response:**

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 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.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration (% w/w)
Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	68410-23-1	70 - 90
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	5 - 10
triethylenetetramine	112-24-3	5 - 10
bis[(dimethylamino)methyl]phenol	71074-89-0	1 - 3

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

**SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.

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- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.  
If on skin, rinse well with water.  
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Continue rinsing eyes during transport to hospital.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.  
Keep respiratory tract clear.  
Do NOT induce vomiting.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : None known.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : No data is available on the product itself.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : No data is available on the product itself.  
  
Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : No hazardous combustion products are known  
  
No data is available on the product itself.
- Specific extinguishing methods : No data is available on the product itself.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

**SECTION 7. HANDLING AND STORAGE**

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Strong acids  
Strong bases  
Strong oxidizing agents

Further information on storage stability : No decomposition if stored and applied as directed.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection

Material : butyl-rubber

Break through time : > 8 h

Material : Solvent-resistant gloves (butyl-rubber)

Material : Nitrile rubber

Break through time : 10 - 480 min

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Colour : amber

Odour : No data is available on the product itself.

Odour Threshold : No data is available on the product itself.

pH : No data is available on the product itself.

Freezing point : No data is available on the product itself.

Melting point : No data is available on the product itself.

Boiling point : > 200 °C

Flash point : > 150 °C  
Method: Pensky-Martens closed cup, closed cup

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Evaporation rate	: No data is available on the product itself.
Flammability (solid, gas)	: No data is available on the product itself.
Flammability (liquids)	: No data is available on the product itself.
Upper explosion limit / Upper flammability limit	: No data is available on the product itself.
Lower explosion limit / Lower flammability limit	: No data is available on the product itself.
Vapour pressure	: < 0.008 hPa (25 °C)
Relative vapour density	: No data is available on the product itself.
Relative density	: 0.93 - 1.01
Density	: 0.95 g/cm <sup>3</sup> (25 °C)
Solubility(ies)	
Water solubility	: soluble (20 °C)
Solubility in other solvents	: No data is available on the product itself.
Partition coefficient: n-octanol/water	: No data is available on the product itself.
Auto-ignition temperature	: No data is available on the product itself.
Decomposition temperature	: > 200 °C
Self-Accelerating decomposition temperature (SADT)	: No data is available on the product itself.
Viscosity	
Viscosity, dynamic	: 20 - 60 mPa.s (25 °C)
Explosive properties	: No data is available on the product itself.
Oxidizing properties	: No data is available on the product itself.
Particle size	: No data is available on the product itself.

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: No data available
Hazardous decomposition	: Carbon oxides

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products

Burning produces noxious and toxic fumes.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : No data is available on the product itself.

**Acute toxicity**

Acute oral toxicity - Product : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : No data available

Acute dermal toxicity - Product : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

Acute toxicity (other routes of administration) : No data available

**Skin corrosion/irritation****Product:**

Assessment: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

Remarks: Extremely corrosive and destructive to tissue.

**Serious eye damage/eye irritation****Product:**

Remarks: May cause irreversible eye damage.

**Respiratory or skin sensitisation****Product:**

Exposure routes: Skin  
Species: Guinea pig  
Result: Causes sensitisation.

Remarks: Causes sensitisation.

Assessment: No data available

**Germ cell mutagenicity****Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:  
Genotoxicity in vitro : Test Type: Ames test  
Test system: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

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**2,4,6-tris(dimethylaminomethyl)phenol:**

Genotoxicity in vitro : Concentration: 5000 ug/plate  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

Concentration: 2500 ug/plate  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 473  
Result: negative

Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative

**triethylenetetramine:**

Genotoxicity in vitro : Concentration: 0 - 200 µg/L  
Metabolic activation: negative  
Method: OECD Test Guideline 482  
Result: negative

**Components:****triethylenetetramine:**

Genotoxicity in vivo : Application Route: Intraperitoneal injection  
Dose: 0 - 600 mg/kg  
Method: OECD Test Guideline 474  
Result: negative

**Carcinogenicity****Components:**

triethylenetetramine:  
Species: Mouse, (male)  
Application Route: Dermal  
Dose: 42 mg/kg  
Frequency of Treatment: 3 days/week  
Method: OECD Test Guideline 451  
Result: negative

Species: Mouse, (male)  
Application Route: Dermal  
Exposure time: 104 weeks  
Dose: 16.8 mg/kg  
Frequency of Treatment: 3 days/week  
Method: OECD Test Guideline 451

Carcinogenicity - Assessment : No data available

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH**

No component of this product present at levels greater than or



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equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity****Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Effects on fertility

: Species: Rat, male and female  
Application Route: Other  
General Toxicity - Parent: No observed adverse effect level:  
1,000 mg/kg body weight  
Method: OECD Test Guideline 422  
Result: Animal testing did not show any effects on fertility.

2,4,6-tris(dimethylaminomethyl)phenol:

Species: Rat, male and female  
Application Route: Oral  
Method: OECD Test Guideline 422  
Remarks: No significant adverse effects were reported

**Components:**

triethylenetetramine:

Effects on foetal  
development

: Species: Rat  
Application Route: Oral  
General Toxicity Maternal: No observed adverse effect level:  
> 750 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: No teratogenic effects

Species: Rabbit  
Application Route: Dermal  
General Toxicity Maternal: No observed adverse effect level:  
125 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: No teratogenic effects

Reproductive toxicity -  
Assessment

: No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

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**Repeated dose toxicity****Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Species: Rat, male and female

NOAEL: 1000 mg/kg

Application Route: Ingestion

Exposure time: 6 Weeks

Number of exposures: 7 d

Method: Subchronic toxicity

2,4,6-tris(dimethylaminomethyl)phenol:

Species: Rat, male and female

NOEL: 15 mg/kg

Application Route: Ingestion

Exposure time: 1,032 h

Number of exposures: 7 d

Method: Subacute toxicity

triethylenetetramine:

Species: Rat, male and female

NOAEL: 50 mg/kg/d

Application Route: Ingestion

Exposure time: 26 Weeks

Number of exposures: 7 d

Method: Subchronic toxicity

Repeated dose toxicity - : No data available  
Assessment

**Aspiration toxicity**

No data available

**Experience with human exposure**

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

**Toxicology, Metabolism, Distribution**

No data available

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**Neurological effects**

No data available

**Further information****Product:**

Remarks: No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Toxicity to fish : LC50: 7.07 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Test substance: Fresh water  
Method: OECD Test Guideline 203

2,4,6-tris(dimethylaminomethyl)phenol:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 175 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: Fresh water

triethylenetetramine:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 330 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: Fresh water  
Method: Fish Acute Toxicity Test

**Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 5.18 mg/l  
Exposure time: 1,152 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 202

2,4,6-tris(dimethylaminomethyl)phenol:

Toxicity to daphnia and other aquatic invertebrates : LC50: 718 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: Marine water

triethylenetetramine:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 31.1 mg/l  
Exposure time: 48 h

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Test Type: static test  
Test substance: Fresh water  
Method: Directive 67/548/EEC, Annex V, C.2.

**Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 4.11 mg/l  
Exposure time: 72 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 201

2,4,6-tris(dimethylaminomethyl)phenol:

Toxicity to algae : ErC50 (Desmodesmus subspicatus (green algae)): 84 mg/l  
Exposure time: 72 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): 6.25 mg/l  
Exposure time: 72 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 201

triethylenetetramine:

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 20 mg/l  
Exposure time: 72 h  
Test Type: semi-static test  
Test substance: Fresh water  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : No data available

Toxicity to fish (Chronic toxicity) : No data available

**Components:**

triethylenetetramine:

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10 (Daphnia magna (Water flea)): 1.9 mg/l  
Exposure time: 21 d  
Test Type: semi-static test  
Test substance: Fresh water  
Method: OECD Test Guideline 202

M-Factor (Chronic aquatic toxicity) : No data available

**Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Toxicity to microorganisms : EC0: > 100 mg/l  
Method: DIN 38412

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## triethylenetetramine:

Toxicity to microorganisms : EC50 (activated sludge): 800 mg/l  
Exposure time: 0.5 h  
Test Type: static test  
Test substance: Fresh water

Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

## Ecotoxicology Assessment

**Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Acute aquatic toxicity : This product has no known ecotoxicological effects.

**Components:**

2,4,6-tris(dimethylaminomethyl)phenol:

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

**Persistence and degradability****Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Biodegradability : Inoculum: activated sludge  
Concentration: 9 mg/l  
Result: Inherently biodegradable.  
Biodegradation: 100 %  
Exposure time: 74 d  
Method: OECD Test Guideline 301B

2,4,6-tris(dimethylaminomethyl)phenol:

Biodegradability : Inoculum: activated sludge  
Concentration: 2 mg/l  
Result: Not readily biodegradable.  
Biodegradation: 4 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D

## triethylenetetramine:

Biodegradability : Inoculum: activated sludge  
Result: Not readily biodegradable.  
Biodegradation: 0 %  
Exposure time: 162 d

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Method: OECD Test Guideline 301D

Inoculum: activated sludge

Result: Not readily biodegradable.

Biodegradation: 20 %

Exposure time: 84 d

Method: Inherent Biodegradability: Modified SCAS Test

Biochemical Oxygen Demand (BOD) : No data available

Chemical Oxygen Demand (COD) : No data available

BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon (DOC) : No data available

Physico-chemical removability : No data available

Stability in water : No data available

Photodegradation : No data available

Impact on Sewage Treatment : No data available

**Bioaccumulative potential****Components:**

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines:

Bioaccumulation : Bioconcentration factor (BCF): 1.85 - 2.69

Test substance: Fresh water

**Components:**

2,4,6-tris(dimethylaminomethyl)phenol:

Partition coefficient: n-octanol/water : log Pow: 0.219 (21.5 °C)  
Method: OPPTS 830.7550

triethylenetetramine:

Partition coefficient: n-octanol/water : log Pow: -2.65 (20 °C)  
Method: OECD Test Guideline 117**Mobility in soil**

Mobility : No data available

**Components:**

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## triethylenetetramine:

Distribution among environmental compartments : Koc: 1584.9 - 5012  
Method: OECD Test Guideline 106

Stability in soil : No data available

**Other adverse effects**

Environmental fate and pathways : No data available

Results of PBT and vPvB assessment : No data available

Endocrine disrupting potential : No data available

Adsorbed organic bound halogens (AOX) : No data available

**Hazardous to the ozone layer**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82  
Protection of Stratospheric Ozone - CAA Section 602 Class I Substances  
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information - Product : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life with long lasting effects.

Global warming potential (GWP) : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION**

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**International Regulations****IATA**

UN/ID No.	: UN 2735
Proper shipping name	: Polyamines, liquid, corrosive, n.o.s. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)
Class	: 8
Packing group	: III
Labels	: Corrosive
Packing instruction (cargo aircraft)	: 856
Packing instruction (passenger aircraft)	: 852

**IMDG**

UN number	: UN 2735
Proper shipping name	: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)
Class	: 8
Packing group	: III
Labels	: 8
EmS Code	: F-A, S-B
Marine pollutant	: yes

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations****DOT Classification**

UN/ID/NA number	: UN 2735
Proper shipping name	: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)
Class	: 8
Packing group	: III
Labels	: CORROSIVE
ERG Code	: 153
Marine pollutant	: yes(DIMER FATTY ACID (C18) POLYAMIDOAMINE RESIN)

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 311/312 Hazards** : No SARA Hazards

**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.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).



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**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.

**The components of this product are reported in the following inventories:**

CH INV	: The formulation contains substances listed on the Swiss Inventory, Not in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: On the inventory, or in compliance with the inventory

**Inventories**

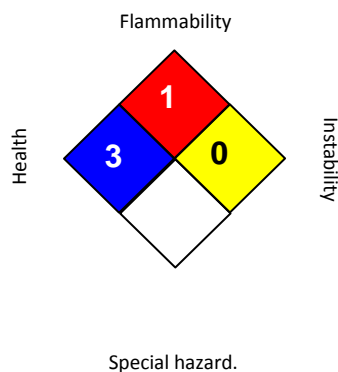
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

**TSCA - 5(a) Significant New Use Rule List of Chemicals**

No substances are subject to a Significant New Use Rule.

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

No substances are subject to TSCA 12(b) export notification requirements.

**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS® IV:**

HEALTH		3
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Revision Date : 09/20/2017

**HARDENER HY 991 US**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	09/20/2017	400001013258	Date of first issue: 09/20/2017

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THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

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