Safety Data Sheet

Material Name: Super Sap 1000 Hardener

* * * Section 1 - Product and Company Identification * * *

Manufacturer Information

Entropy Resins, Inc.
30621 San Antonio St.
Hayward, CA 94544
USA

Phone: +1-310-882-2582

Emergency # +1-760-476-3962 Global Response Contract: 333178

Hijos De A. Ferrer-Dalmau
C/ Rosalia de Castro 21
08025 Barcelona
Spain

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Skin Corrosion - Category 1B
Serious Eye Damage - Category 1
Skin Sensitization - Category 1

GHS LABEL ELEMENTS

Symbol(s)

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary Statements

Prevention

Do not breathe dusts or mists.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
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.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
68410-23-1	Fatty acids, C18-unsaturated, dimers, reaction products with Polyethylenepolyamines	25-55
100-51-6	Benzyl alcohol	<20
112-24-3	Triethylenetetramine	<15
26950-63-0	1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with methyloxirane	<15
225795-35-7	Phenol, 2,4,6-tris[[[3-(dimethylamino)propyl]amino]methyl]-	5-20
90-72-2	2,4,6-Tri(dimethylaminomethyl)phenol	<10

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

First Aid: Skin

Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

First Aid: Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

First Aid: Inhalation

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous Combustion Products

Decomposition products may include the following materials: Carbon oxides, Nitrogen oxides, Burning produces obnoxious and toxic fumes.

Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Stop the flow of material, if this is without risk.

Materials and Methods for Clean-Up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Emergency Measures

Isolate area. Keep unnecessary personnel away.

Personal Precautions and Protective Equipment

Wear appropriate protective equipment and clothing during clean-up.

Environmental Precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage Procedures

Store between the following temperatures: 2 to 40°C (35.6 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Incompatibilities

Strong acids, strong bases, strong oxidising agents

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Benzyl alcohol (202-859-9)

Finland: 10 ppm TWA; 45 mg/m3 TWA

Triethylenetetramine (203-950-6)

Sweden: 1 ppm LLV; 6 mg/m3 LLV
2 ppm STV; 12 mg/m3 STV

Engineering Measures

If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal Protective Equipment: Respiratory

In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Personal Protective Equipment: Hands

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Personal Protective Equipment: Eyes

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Personal Protective Equipment: Skin and Body

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Amber	**Odor:**	Amine-like
Physical State:	Liquid	**pH:**	11.3-11.4
Vapor Pressure:	0.0001 kPA (20°C)	**Vapor Density:**	ND
Boiling Point:	ND	**Melting Point:**	ND
Solubility (H2O):	466.91 g/l	**Specific Gravity:**	ND
Evaporation Rate:	ND	**VOC:**	ND
Octanol/H2O Coeff.:	0.99	**Flash Point:**	>100°C
Flash Point Method:	PMCC	**Upper Flammability Limit (UFL):**	ND
Lower Flammability Limit (LFL):	ND	**Burning Rate:**	ND
Auto Ignition:	ND		

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

None

Incompatible Products

Strong acids, strong bases, strong oxidising agents

Hazardous Decomposition Products

Decomposition products may include the following materials: Carbon oxides, Nitrogen oxides, Burning produces obnoxious and toxic fumes.

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

Component Analysis - LD50/LC50

Benzyl alcohol (100-51-6)

Inhalation LC50 Rat 8.8 mg/L 4 h; Oral LD50 Rat 1230 mg/kg; Dermal LD50 Rabbit 2000 mg/kg

Triethylenetetramine (112-24-3)

Oral LD50 Rat 2500 mg/kg; Dermal LD50 Rabbit 550 mg/kg

2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)

Oral LD50 Rat 1000 mg/kg; Dermal LD50 Rat 1280 mg/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Causes severe burns. May cause an allergic skin reaction. Adverse symptoms may include the following: pain or irritation, redness, blistering may occur.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Causes serious eye damage. Adverse symptoms may include the following: pain, watering, redness.

Potential Health Effects: Ingestion

Harmful if swallowed. May cause burns to mouth, throat and stomach.

Potential Health Effects: Inhalation

May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Respiratory Organs Sensitization/Skin Sensitization

May cause an allergic skin reaction.

Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects.

Carcinogenicity

A: General Product Information

This product is not reported to have any carcinogenic effects.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any single exposure specific target organ toxicity effects.

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any repeat exposure specific target organ toxicity effects.

Aspiration Respiratory Organs Hazard

This product is not reported to have any aspiration hazard effects.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

This product is not reported to have any ecotoxicity effects.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Benzyl alcohol (100-51-6)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	460 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	10 mg/L [static]	
3 Hr EC50 Anabaena variabilis	35 mg/L	
48 Hr EC50 water flea	23 mg/L	

Triethylenetetramine (112-24-3)

Test & Species		Conditions
96 Hr LC50 Poecilia reticulata	570 mg/L [semi-static]	
96 Hr LC50 Pimephales promelas	495 mg/L	
72 Hr EC50 Desmodesmus subspicatus	2.5 mg/L	

72 Hr EC50 Pseudokirchneriella subcapitata	20 mg/L
96 Hr EC50 Pseudokirchneriella subcapitata	3.7 mg/L
48 Hr EC50 Daphnia magna	31.1 mg/L

Persistence/Degradability

No information available for the product.

Bioaccumulation

No information available for the product.

Mobility in Soil

No information available for the product.

* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/national/international regulations.

* * * Section 14 - Transportation Information * * *

IATA Information

Shipping Name: Polyamines, liquid, corrosive, n.o.s. (FORMALDEHYDE, POLYMER WITH DIMETHYLPROPANEDIAMINE AND PHENOL 2,4,6- TRIS(DIMETHYLAMINOMETHYL)PHENOL)
UN #: 2735 **Hazard Class:** 8 **Packing Group:** III

ICAO Information

Shipping Name: Polyamines, liquid, corrosive, n.o.s. (FORMALDEHYDE, POLYMER WITH DIMETHYLPROPANEDIAMINE AND PHENOL 2,4,6- TRIS(DIMETHYLAMINOMETHYL)PHENOL)
UN #: 2735 **Hazard Class:** 8 **Packing Group:** III

IMDG Information

Shipping Name: Polyamines, liquid, corrosive, n.o.s. (FORMALDEHYDE, POLYMER WITH DIMETHYLPROPANEDIAMINE AND PHENOL 2,4,6- TRIS(DIMETHYLAMINOMETHYL)PHENOL)
UN #: 2735 **Hazard Class:** 8 **Packing Group:** III

* * * Section 15 - Regulatory Information * * *

Regulatory Information

EU MARKING AND LABELLING:

Symbol(s):

C

Risk Phrases:

R34 Causes burns.
R22 Harmful if swallowed.
R43 May cause sensitization by skin contact.

Substance Analysis - Inventory

Component/CAS	EC #	EEC	CAN	TSCA
Fatty acids, C18-unsaturated, dimers, reaction products with Polyethylenepolyamines 68410-23-1	614-452-7	No	DSL	Yes
Benzyl alcohol 100-51-6	202-859-9	EINECS	DSL	Yes
1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with methyloxirane 26950-63-0	500-055-5	No	DSL	Yes
Triethylenetetramine 112-24-3	203-950-6	EINECS	DSL	Yes
Phenol, 2,4,6-tris[[[3-(dimethylamino)propyl]amino]methyl]- 225795-35-7	607-115-0	No	NDSL	Yes
2,4,6-Tri(dimethylaminomethyl)phenol 90-72-2	202-013-9	EINECS	DSL	Yes

* * * Section 16 - Other Information * * *

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

Literature References

None

End of Sheet