

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: : **Super Sap® CLF Fast Hardener**

Product Use Description: : Modified polyamine for curing epoxy resins

Company: : Entropy Resins, Inc.
18525 S Main St
Gardena, CA 90248

Contact numbers / Emergency: : Los Angeles: (310) 882-2120
: 24/7 Emergency Hotline: (760) 476-3962
: Global Response Access Code: 333178

2. COMPOSITION/ INFORMATION ON INGREDIENTS

<u>CAS Number</u>	<u>Components</u>	<u>WT %</u>
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Description – The exact chemical identity of this component is trade secret. This component is composed of Polyamine polymer solutions, Isophoronediamine, 1,3- Benzenedimethanamine (MXDA), Benzylidimethylamine, and proprietary polyamine components.

CAS Number – N/A

Chemical Family: Amine

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

3. HAZARDS IDENTIFICATION

Emergency Overview: Harmful if swallowed. Corrosive. Causes severe irritation if inhaled, severe skin irritation, severe eye irritation, and may cause skin and eye burns. Can cause allergic respiratory reaction and allergic skin reaction.

Xi, N	Irritant, toxic to aquatic environment
R 36/38	Irritating to eyes and skin.
R 43	May cause sensitization by skin contact.
R51/53	Toxic to aquatic organism. May cause long term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Symptoms and effects: Irritation of the skin and eyes.

First Aid - Inhalation: Remove to fresh air.

First Aid - Skin: For skin contact, under a safety shower, immediately remove contaminated clothing and shoes. Wash affected areas thoroughly with large amounts of water, and soap if available, for at least 15 minutes. Seek immediate medical attention. Discard or decontaminate clothing before re-use and destroy contaminated shoes.

First Aid - Eye: For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. If physician is not available, flush for an additional 15 minutes. Seek immediate medical attention.

First Aid - Ingestion: If swallowed, immediately give at least 3-4 glasses of water, but do not induce vomiting. If vomiting occurs, give fluids again. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.

Overexposure Effects: Causes severe irritation if inhaled, severe skin irritation, severe eye irritation, and may cause skin and eye burns. Can cause allergic respiratory reaction and allergic skin reaction.

Advice to Physicians: If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed.

5. FIRE FIGHTING MEASURES

Super Sap CLF Fast Hardener
MSDS Number: MSDS_12_CLF01_v3_US

Version No.: 03

MSDS US
1 / 4
Revision date: 28-Feb-2012

Flash Point: > 266 °F (> 130 °C)
Flash Point Method Used: Closed Cup
Fire Fighting Extinguishing Media: Dry chemical powder, carbon dioxide, foam, water spray or fog, sand or earth.
Fire Fighting Equipment: Use full protective clothing and self-contained breathing apparatus.
Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid all personal contact with skin, eyes and clothing
Personal protection: Wear protective clothing specified for normal operations (see section 8).
Environmental precautions: Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers. If material enters drains it should be pumped out into an open vessel. Emergency services may need to be called to assist in this operation.
Clean-up methods- small spillage: Absorb or contain liquid with sand, earth or other absorbent spill control material. Shovel material to labelled sealable container for safe disposal. Do not use sawdust, wood chips or other cellulosic materials to absorb the spill, as the possibility for spontaneous combustion exists. Wash spill residue with warm, soapy water if necessary.
Large spillage: Transfer to a labelled container for product recovery or safe disposal. Otherwise treat as for small spillage.

7. HANDLING AND STORAGE

Signal Word: Danger!
Precautions: Causes severe irritation if inhaled, severe skin irritation, severe eye irritation, and may cause skin and eye burns. Can cause allergic respiratory reaction and allergic skin reaction. Do not breath vapor mist. Do not get in eyes, on skin, or on clothing. Keep clothing
Handling: Avoid contact with skin, eyes and clothing
Storage: Keep container tightly closed and dry to prevent moisture absorption and contamination.
Storage temperatures: Ambient.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational exposure standards: None established.
Respiratory protection: Not normally required. In a confined space wear half mask respirator with organic vapour cartridge and build-in particular filter NPF 20 (gas only). If product is applied by spraying wear self contained breathing apparatus.
Skin protection: Wear impervious nitride rubber gloves or butyl rubber gloves, gauntlet type.
Eye protection: Monogoggles.
Body protection: Standard issue work clothes, safety boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Amber
Odor: Amine
Density: .97 – 1.2 g/cm³ @ 20 °C (68 °F)
Vapor Pressure: .1 Pa at 20 °C (68 °F)
Boiling Point: > 200 °C (>392 °F)
Decomposition Temperature: > 200 °C (>392 °F)
Evaporation Rate: <1 (Butyl Acetate = 1)
Flash point: >100 °C (212 °F)
Solubility in water: Miscible @ 20 °C (68 °F)

10. STABILITY/REACTIVITY

Stability: Stable under normal use conditions. Reacts with strong oxidizing agents, bases, and acids. Polymerizes exothermically with amines, mercaptens and Lewis acids at ambient temperature and above. Polymerizes in contact with bases (eg caustic soda), ammonia, primary and secondary amines, alcohols and acids.
Conditions to avoid: Caustic soda can induce a vaporous polymerisation at temperatures over 150 °C.
Materials to avoid: Strong oxidizing agents, bases, and acids. Caustic soda.
Hazardous decomposition products: Carbon monoxide, carbon dioxide, aldehydes, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Eye irritation: Severe irritant.

Super Sap CLF Fast Hardener

MSDS Number: MSDS_12_CLF01_v3_US

Version No.: 03

MSDS US
2 / 4
Revision date: 28-Feb-2012

Skin irritation: Severe irritant.
Respiratory irritation: Severe irritant.
Sensitization: Causes allergic skin and respiratory sensitivity in some people.

Component Toxicological Information: p-tert Butyl Phenol can cause skin depigmentation (vitiligo) and systematic damage to liver and thyroid.

12. ECOLOGICAL INFORMATION

Mobility: No data available
Persistence/degradability: No data available
Bioaccumulation: No data available
Acute toxicity - fish: No data available

13. DISPOSAL CONSIDERATIONS

Precautions: See section 8. Refer to section 7 before handling the product or containers.
Waste disposal: Recover or recycle product and container, if possible. Otherwise incineration or dispose to licensed contractor in accordance with federal, state and local regulations.
Product disposal: Drain container thoroughly. Rinse three times with suitable solvent. Treat rinses as for product disposal. After draining, vent in a safe place away from sparks.
Local legislation: Control of Pollution Act 1974.
Control of Pollution (Special waste) Regulations 1980.
Environmental Protection Act 1990.

14. TRANSPORT INFORMATION

49 CFR

Highway and Rail:.....49 CFR 173.154 paragraph 2, subparagraph C

5 Liters or less =
Consumer Commodity ORM-D

More than 5 Liters =
Name: Amines, liquid, corrosive, n.o.s. (m-Phenylenebis(methylamine))
Classification: 8
UN Number: 2735
Packing group: III

IATA

Name: Amines, liquid, corrosive, n.o.s. (m-Phenylenebis(methylamine))
Classification: 8
UN Number: 2735
Packing group: III
Passenger Aircraft: Packing Instruction 852 per IATA DGR
Cargo Only: Packing Instruction 856 per IATA DGR

IMDG

Name: Amines, liquid, corrosive, n.o.s. (m-Phenylenebis(methylamine))
Classification: 8
UN Number: 2735
Packing group: III

15. REGULATORY INFORMATION

US Federal Regulations:

OSHA: This material safety data sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261)

SARA Title III: Section 304 – CERCLA: Not Listed

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372). This information must be included in all MSDS's that are copied and distributed for this material.

TSCA Section 8(b) – Inventory Status: Chemical components listed on TSCA Inventory.

TSCA Section 12(b) – Export Notification: This product contains chemical(s) which is (are) regulated by TSCA 12(b) Regulation and it is required that proper export notification shall be sent to EPA prior to shipping out of the United States of America.

CAS Number: 84852-15-3

Chemical Name: 4-Nonylphenol, branched

International Regulations:

Canadian Inventory Status: The product contains components included on the Domestic Substances List (DSL) and the Non-Domestic Substances List (NDSL)

State Regulations:

New Jersey Right-to-Know: The following is required composition information:

CAS Number 25154-52-3

Chemical Name: Nonylphenol

CAS Number 1477-55-0

Chemical Name: 1,3-Benzenedimethanamine

CAS Number: 98-54-4

Chemical Name: Phenol, 4-(1,1-dimethylethyl)-

Pennsylvania Right-to-Know: The following is required composition information:

CAS Number 25154-52-3

Chemical Name: Nonylphenol

CAS Number 1477-55-0

Chemical Name: 1,3-Benzenedimethanamine

CAS Number: 98-54-4

Chemical Name: Phenol, 4-(1,1-dimethylethyl)-

16. OTHER INFORMATION

Uses: - Compositions for the building and civil engineering industries e.g. flooring compounds, primers, adhesives, mortars, joints and grouts
- Offshore & Marine applications

SDS distribution: This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.

USER'S RESPONSIBILITY / DISCLAIMER OF LIABILITY: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as a guarantee of any specific property of the product.

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This bulletin cannot cover all possible situations that the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to develop appropriate work practice guidelines and employee instructional programs for your operation.