

MATERIAL SAFETY DATA SHEET

1. Product Information

Product Name: Rough Coat Curing Agent
CAS Number: None assigned

Product Class: Modified Epoxy Resin
Product Code: NSP030-B

date of prepn: 01JUL05

2. Information on Ingredients

Ingredients	CAS Number	Exposure Limits
Modified Epoxy Resin	Proprietary	None Assigned
Alkyl Amines/amine Epoxy Adducts	Proprietary	None Assigned
Benzyl Alcohol	100-51-6	None Assigned
Phenol	108-95-2	ACGIH TLV 5 ppm Skin
Microcrystalline Silica, tripoli	1317-95-9	ACGIH TLV 0.1 mg/cu.m
Hydrous Magnesium Silicate	14807-96-6	ACGIH TLV 2.0 mg/cu.m
Xylol	1330-20-7	ACGIH TLV 150 ppm OSHA PEL 100 ppm
Ethyl Benzene	100-41-4	ACGIH TLV 100 ppm OSHA PEL 100 ppm

Contains other ingredients and pigments which should be treated as nuisance dust - TLV - 10 mg/cu.m, 8 hr. TWA (total dust)

3. Hazards Identification

Flammable, beige, viscous resinous material with pungent odor. Causes severe eye irritation. Causes skin irritation. May cause allergic skin reaction. Avoid all contact with eyes, skin or clothing and avoid breathing mist or spray.

Potential Health Effects:

Eye: Causes severe eye irritation.

Skin: Causes skin irritation. May cause sensitization and dermatitis.

Ingestion: Substance is extremely harmful if swallowed.

Inhalation: Prolonged or repeated inhalation may cause central lung damage or respiratory irritation. Avoid breathing mist or spray.

CHRONIC (CANCER INFORMATION): Contains Microcrystalline Silica. Inhalation of silica dust (respirable) may cause delayed lung injury or disease. The International Agency for Research on Cancer (IARC) has evaluated that there is 'sufficient evidence' that Microcrystalline Silica can cause cancer in laboratory animals and there is 'limited evidence' with respect to humans. IARC Monograph: Level 2A Grouping. Take appropriate measures to avoid breathing spray during application or removal of cured product by use of NIOSH approved respirator.

4. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids apart to ensure rinsing of entire eye surface and lids with water. Get immediate medical attention.

Skin: Wash affected areas with mild soap and water for at least 15 minutes. Get medical attention if necessary.

Ingestion: If Part B is swallowed, immediately give 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. Get immediate medical attention. If mixed product (Part A and Part B) is swallowed, do not induce vomiting and get immediate medical attention.

Inhalation: If ill effects occur, remove to fresh air. Keep warm and quiet and get medical attention promptly.

5. Fire Fighting Measures

Flammable Properties: Flash Point: 59 Deg. F

Hazardous Combustion Products: Carbon monoxide, carbon dioxide and aldehydes.

Extinguishing Media: Foam, carbon dioxide, dry chemical or water spray.

Fire Fighting Instructions: Use water spray to cool fire exposed containers and structures and disperse vapors; re-ignition is possible. Firefighters should wear goggles and self-contained breathing apparatus to avoid inhalation. Use remote spray monitors and fight fire from behind shields.

6. Accidental Release Measures

Small Spill: Do not turn on any ignition source until the area is determined to be free from explosion or fire hazard. Wear suitable protective equipment. Stop spill at source and absorb spill with suitable absorbent material (dry sand, earth) and shovel into closed containers for disposal. Flush contaminated area with water.

Large Spill: Follow directions for small spill. Dike area and pump into closed containers. Prevent runoff from entering into storm sewers and ditches which could lead to natural waterways. Wear protective equipment during cleanup.

7. Handling and Storage

Handling: Avoid personal contact. Never use welding or cutting torch on or near container (even empty due to residue) because product can ignite explosively. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited from distant sources. Use proper grounding procedures. Any use of this product in elevated temperatures should be thoroughly evaluated for safe conditions.

Storage: Store in closed containers in cool, dry, place. Avoid heat and warm storage areas.

8. Exposure Controls and Personal Protection

Engineering Controls: Mechanical ventilation is recommended. Special local ventilation may be needed where vapors are expected to escape.

Respiratory Protection: NIOSH approved respirator suitable for organic vapors if TLV is exceeded.

Skin Protection: Chemical-resistant plastic or rubber gloves. Wear protective equipment as required to prevent wetting the skin and clothing.

Eye

Protection: Chemical splash goggles.

9. Physical and Chemical Properties

Boiling Point: 211°F

Vapor Density: Heavier than air

% Volatiles: 16

Solubility in Water: Slightly miscible

Specific Gravity: 1.2

Appearance: Resinous, beige, viscous liquid.

Product Name: Rough Coat B Curing Agent

10. Stability and Reactivity

Chemical Stability: (Conditions to avoid) Heat, spark, open flame, smoking, electric motors, pilot lights and other ignition sources.

Incompatibility: Strong oxidizers, acids, alkalies and epoxy hardeners under uncontrolled conditions.

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide, Aldehydes.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

None available.

12. Ecological Information

None available.

13. Disposal Considerations

Care should be taken to ensure that the material or its containers are disposed of in an approved facility in accordance with current federal, state and local regulations.

14. Transport Information

Regulated by DOT. Proper Shipping Name: Paint (Contains Isopropanol, Hazard Class 3, UN 1263. Packing Group II, Hazard Label - Flammable Liquid.

15. Regulatory Information

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

SARA Section 313 Listed Ingredients: This product contains a substance that is subject to the reporting requirements of 40 CFR 372.

2.0% Phenol

CAS # 108-95-2

9.0% Xylol

CAS # 1330-20-7

16. Other Information

This information herein is given in good faith and is accurate to the best of the manufacturer's knowledge, however no warranty, express or implied, is made as to the accuracy or completeness of these data and recommendations.

MATERIAL SAFETY DATA SHEET

1. Product Information

Product Name: Rough Coat A Epoxy Resin
CAS Number: N/A

Product Class: Modified Epoxy Hardener Date of prepn: 01JUL05
Product Code: NSP030-A

2. Information on Ingredients

Ingredients	CAS Number	Exposure Limits
Modified Epoxy Resin	Proprietary	None Assigned
N-Butyl Glycidyl Ether	2426-08-6	ACGIH TLV 25 ppm
Microcrystalline Silica, Tripoli	1317-95-9	ACGIH TLV 0.1 mg/cu.m
Titanium Dioxide	13463-67-7	OSHA PEL 15.0 mg/cu.m
Hydrous Magnesium Silicate	14807-96-6	ACGIH TLV 2.0 mg/cu.m
Xylol	1330-20-7	ACGIH TLV 150 ppm OSHA PEL 100 ppm
Ethyl Benzene	100-41-4	ACGIH TLV 100 ppm OSHA PEL 100 ppm

Contains other ingredients and pigments which should be treated as nuisance dust - TLV - 10 mg/cu.m, 8 hr. TWA (total dust)

3. Hazards Identification

Flammable viscous resinous material with pungent odor. Color indicated on label. Irritating to eyes, skin and respiratory tract.

Potential Health Effects:

Eye: Causes severe eye irritation.

Skin: Causes skin irritation. May cause sensitization and dermatitis.

Ingestion: Swallowing large amounts may cause injury and GI tract irritation.

Inhalation: May cause nasal irritation. Prolonged overexposure may cause central nervous system depression or lung injury

CHRONIC (CANCER INFORMATION): Contains Microcrystalline Silica. Inhalation of silica dust (respirable) may cause delayed lung injury or disease.

The International Agency for Research on Cancer (IARC) has evaluated that there is 'sufficient evidence' that Microcrystalline Silica can cause cancer in laboratory animals and there is 'limited evidence' with respect to humans. IARC Monograph: Level 2A Grouping. Take appropriate measures to avoid breathing spray during application or removal of cured product by use of NIOSH approved respirator. By using proper safety precautions, this ingredient is not expected to present a significant hazard.

4. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids apart to ensure rinsing of entire eye surface and lids with water.

Skin: Promptly wipe clean with paper or cloths and wash with soap and water. Remove and wash any contaminated clothing before reuse.

Ingestion: If Part A is swallowed, promptly induce vomiting and get medical attention. Do not give anything by mouth to an unconscious or convulsing person. If mixed product (Part A and Part B) is swallowed, do not induce vomiting and get immediate medical attention.

Inhalation: If ill effects occur, remove to fresh air. Keep warm and quiet and get medical attention promptly.

5. Fire Fighting Measures

Flammable Properties: Flash Point: 59 Deg. F Method: TCC

Hazardous Combustion Products: Carbon monoxide, carbon dioxide and aldehydes.

Extinguishing Media: Foam, carbon dioxide, dry chemical or water spray.

Fire Fighting Instructions: Use water spray to cool fire exposed containers and structures and disperse vapors; re-ignition is possible. Firefighters should wear goggles and self-contained breathing apparatus to avoid inhalation. Use remote spray monitors or fight fire from behind shields.

6. Accidental Release Measures

Small Spill: Do not turn on any ignition source until the area is determined to be free from explosion or fire hazard. Wear suitable protective equipment. Stop spill at source and absorb spill with suitable absorbent material (dry sand, earth) and shovel into closed containers for disposal. Flush contaminated area with water.

Large Spill: Follow directions above for small spill. Dike area and pump into closed containers. Prevent runoff from entering into storm sewers and ditches that could lead to natural waterways. Wear protective equipment during cleanup.

7. Handling and Storage

Handling: Avoid personal contact. Never use welding or cutting torch on or near container (even empty due to residue) because product can ignite explosively. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited from distant sources. Use proper grounding procedures. Any use of this product in elevated temperatures should be thoroughly evaluated for safe conditions.

Storage: Store in closed containers in a cool, dry place. Avoid heat and warm storage areas.

8. Exposure Controls and Personal Protection

Engineering Controls: Mechanical ventilation is recommended. Special local ventilation may be needed where vapors are expected to escape.

Respiratory Protection: NIOSH approved respirator suitable for organic vapors if TLV is exceeded.

Skin Protection: Chemical-resistant plastic or rubber gloves. Wear protective equipment as required to prevent wetting the skin and clothing. **Eye**

Protection: Chemical splash goggles or full face shield is recommended.

9. Physical and Chemical Properties

Boiling Point: 211°F

Vapor Density: (Air = 1) Heavier than air

% Volatiles: 33

Solubility in Water: Slightly miscible

Specific Gravity: 1.3

Appearance: Resinous, viscous liquid. Color indicated on label.

Product Name: Rough Coat B Curing Agent

10. Stability and Reactivity

Chemical Stability: (Conditions to avoid) Heat, spark, open flame, smoking, electric motors, pilot lights and other ignition sources.

Incompatibility: Strong oxidizers, acids, alkalis, and epoxy hardeners under uncontrolled conditions.

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide, Aldehydes, nitrogen oxides.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

None available.

12. Ecological Information

None available.

13. Disposal Considerations

Care should be taken to ensure that the material or its containers are disposed of in an approved facility in accordance with current federal, state and local regulations.

14. Transport Information

Regulated by DOT. Proper Shipping Name: Paint (Contains Isopropanol), Hazard Class 3, UN 1263, Packing Group II, Hazard Label - Flammable Liquid.

15. Regulatory Information

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

SARA Section 313 Listed Ingredients: This product contains a substance which is subject to the reporting requirements of 40 CFR 372 -

Chemical name: Xylol CAS # 133-20-7 WT/% 18.21

16. Other Information

This information herein is given in good faith and is accurate to the best of the manufacturer's knowledge, however no warranty, express or implied, is made as to the accuracy or completeness of these data and recommendations.