



HXTAL Adhesive, LLC. - HXTAL NYL-1 Part A MSDS Sheets
Revision Date 11/10/10



Material Safety Data Sheet

Product Name: HXTAL NYL-1 Epoxy Adhesive Part A (Resin)
MSDS Date: 11/10/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: HXTAL NYL-1 Part A (Resin)

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	CAS#	Concentration
Epoxy resin	30583-72-3	100%
Diglycidyl ether	2238-07-5	130ppm
1-chloro-2,3-epoxy propane	106-89-8	5ppm-10ppm

3. HAZARDS IDENTIFICATION

Physical State: Liquid
Color: Clear, colorless
Odor: odorless
Hazard Summary: May be slightly toxic and may be harmful if swallowed. Irritating to eyes and skin. May cause sensitization by skin contact.

4. FIRST AID MEASURES

Inhalation:	Remove to fresh air.
Skin Contact:	Wash skin with water using soap if available. If persistent irritation occurs, contact a physician.
Eye Contact:	Flush eyes with water. If persistent irritation occurs, contact a physician.
Ingestion:	Do not induce vomiting without medical advice. Immediate medical attention is required. Never give anything by mouth to an unconscious person. Call a physician.

Notes to Physician

Treatment:	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Foam Carbon dioxide (CO ₂) Dry Chemical Sand or earth may be used for small fires only.
Extinguishing media which shall not be used for safety reasons:	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards during fire fighting:	Keep adjacent containers cool by spraying with water.
Special protective equipment for fire-fighters:	Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid contact with skin, eyes and clothing.
Environmental precautions:	Prevent contamination of soil and water. Discharge into the environment must be avoided. Do not flush into surface water or sanitary sewer system.

Methods for clean-up: Absorb liquid with sand, earth or spill control material. Shovel up and place in a labelled, sealable container for subsequent safe disposal. Scrub contaminated surfaces with detergent solution.

7. HANDLING AND STORAGE

Handling

Handling: Avoid contact with skin, eyes and clothing.
Avoid breathing vapors, spray or mist.

Storage

Requirements for storage areas and containers: Keep containers tightly closed in dry, cool and well ventilated place.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures: Use with local exhaust ventilation.
Eye protection: Wear safety glasses with side shields.
Hand protection: Rubber gloves.
Skin and body protection: Standard issue work clothes.
Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Viscous liquid
Color: Colorless
Odor: Odorless
Specific gravity: 1.09
Melting point/range: 10°C (50° F)
Flash point: Typical 115° C (239° F)
Relative vapor density: >1 (Air = 1.0)

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Water solubility: Negligible
Viscosity, dynamic: 1.8-2.5 Pas at 25° C (77° F) ASTM D-445

10. STABILITY AND REACTIVITY

Conditions to avoid: Caustic soda can induce vigorous polymerization at temperatures around 200° C (392° F)

Materials to avoid: Caustic sodas
Strong oxidizing agents.

Hazardous decomposition products: Hazardous decomposition products are not expected to form during normal storage.

Hazardous reactions: Stable under normal conditions.
Reacts with strong oxidizing agents.
Polymerizes exothermically with amines.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity: LD50 rat
Low toxicity, LD50 > 2000mg/kg.

Acute dermal toxicity: LD50 rabbit
Low toxicity, LD50 > 2000mg/kg.

Acute inhalation toxicity: no data available.

Skin irritation: Expected to be slight irritant.

Eye irritation: Not expected to be irritating.

12. ECOLOGICAL INFORMATION

Biodegradability: This section will be updated as ecological reviews are completed.

Toxicity to fish: This section will be updated as ecological reviews are completed.

13. DISPOSAL CONSIDERATIONS

Observe all Federal, State and Local Environmental regulations.

14. TRANSPORT INFORMATION

DOT Classification: Not regulated for transport

IATA Classification: Not regulated for transport

15. REGULATORY INFORMATION

US Toxic Substances Control Act: On TSCA Inventory

Australia (Industrial Chemical Notification and Assessment Act) On the inventory or in compliance with the inventory

Canada All components of this product are on the Canadian DSL list.

Japan Not listed

Korea On the inventory or in compliance with the inventory

Phillipines On the inventory or in compliance with the inventory

China On the inventory or in compliance with the inventory

Switzerland On the inventory or in compliance with the inventory

New Zealand On the inventory or in compliance with the inventory

16. OTHER INFORMATION

HMIS III

Health:	2
Flammability	1
Reactivity:	0
Personal Protection	0



Material Safety Data Sheet

Product Name: HXTAL NYL-1 Epoxy Adhesive Part B (Hardener)

MSDS Date: 11/10/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: HXTAL NYL-1 Part B (Hardener)

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	CAS#	Concentration
Poly(oxy)(methyl-1,2-ethanediyl), alpha-hydro-omega-(2-aminomethylathoxy)-ether 2-ethyl-2-(hydroxymethyl)-1,3-propanediol(3:1)	39423-51-3	< 92%
1,3-diaza-2,4-cyclopentadiene, glyoxaline	288-32-4	< 10%

3. HAZARDS IDENTIFICATION

Physical State Liquid

Color Clear, colorless

Odor slight ammonia

Hazard Summary Harmful if swallowed. Severe eye irritant. Severe respiratory irritant. Severe skin irritant

Potential Health Effects

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Skin: Irritating to skin.
Prolonged skin exposure can be corrosive.

Eyes: Severe eye irritation.
Causes itching, burning, redness and tearing.

Ingestion: Harmful if swallowed.

Inhalation: May cause respiratory tract irritation.

Aggravated Medical Condition: Eye disease.
Asthma.
Skin disorders and Allergies

Carcinogenicity

California Prop 65: This product contains a chemical known to the State of California to cause cancer. CAS#39423-51-3

Cancer	Reproductive	No significant risk	Max acceptable dose
Yes	No significant risk	No significant risk	No

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician if irritation develops or persists.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids for at least 15 minutes. Call a physician, preferably an ophthalmologist.

Ingestion: Do not induce vomiting without medical advice. Immediate medical attention is required. Never give anything by mouth to an unconscious person. Call a physician.

Notes to Physician

Treatment: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Alcohol resistant foam

Carbon dioxide (CO₂)

Dry Chemical

Dry Sand

Specific hazards during fire fighting: Incomplete combustion may form carbon monoxide.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear personal protective equipment

Immediately evacuate personnel to safe areas.

Ensure adequate ventilation.

Do not swallow.

Avoid breathing vapors, mist or gas.

Avoid contact with skin, eyes and clothing.

Environmental precautions: Prevent further leakage or spillage if safe to do so.

Discharge into the environment must be avoided.

Environmental precautions: Do not flush into surface water or sanitary sewer system.

Prevent product from entering drains.

Collect contaminated fire extinguishing water separately. This must not discharge into drains.

Methods for clean-up: Ventilate the area.

Methods for clean-up: Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

7. HANDLING AND STORAGE

Handling

Handling: Wear personal protective equipment.
Use only in well ventilated areas.
Keep container tightly closed.
Do not swallow.
Avoid breathing vapors, mist or gas.
Avoid contact with skin, eyes and clothing.

Storage

Requirements for storage areas and containers: Keep containers tightly closed in dry, cool and well ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep separate from acids.
Keep away from direct sunlight.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Protective Measures: Ensure that eyewash stations and safety showers are close to the workstation location.

Engineering measures: Use with local exhaust ventilation.
Prevent vapor buildup by providing adequate ventilation during and after use.

Eye protection: Wear appropriate safety eye wear.
Wear safety glasses with side shields.

Hand protection: Solvent resistant gloves.

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Skin and body protection:	Solvent resistant apron. Long sleeve shirts recommended.
Respiratory protection:	In case of sufficient ventilation wear suitable respiratory equipment.
Hygiene measures:	When using, do not eat or drink or smoke. Wash hands before breaks and immediately after handling the product. Keep work clothes separate. Remove and wash contaminated clothing before re-use. Do not swallow. Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid, clear
Color:	Colorless
Odor:	Ammoniacal
pH:	12.3
Water solubility:	Soluble
Boiling point/range:	>268° C (200° F)
Flash point:	162.78° C (325° F)
Relative vapor density:	>1 (Air = 1.0)
Vapor pressure:	<1 mm Hg at 40° C
Specific Gravity:	0.9812
Relative Density:	0.98 (Water = 1.0)
Viscosity, dynamic:	>80 CPS at 25° C

10. STABILITY AND REACTIVITY

Materials to avoid:	Strong acids.
Hazardous decomposition products:	In case of fire hazardous decomposition products may be produced such as: Carbon monoxide Carbon dioxide (CO ₂)
Hazardous reactions:	Hazardous polymerization does not occur. Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:	LD50 rat Dose: 220 mg/kg
Acute dermal toxicity:	LD50 rabbit Dose: 562 mg/kg
Potential acute health effects	
Ingestion:	Toxic if swallowed. May cause burns to mouth, throat and stomach
Inhalation:	Irritating to Respiratory system.
Eyes:	Corrosive to eyes. Causes burns.
Skin:	Corrosive to the skin. Causes burns.
Potential chronic health effects	
Target organs:	none.
Carcinogenicity:	No known significant effects or critical hazards
Mutagenicity:	No known significant effects or critical hazards

12. ECOLOGICAL INFORMATION

Biodegradability:	Not readily biodegradable
Toxicity to fish:	LC50 Dose: >100mg/L Exposure time: 96h
Additional ecological information:	Should not be released into the environment. Accumulation in aquatic organisms is unlikely.

13. DISPOSAL CONSIDERATIONS

Observe all Federal, State and Local Environmental regulations.

14. TRANSPORT INFORMATION

DOT Classification:

Proper shipping name:	Amines, corrosive liquids, n.o.s.
Class:	8
UN ID#:	UN2735
Packing Group:	III

IATA Classification:

Proper shipping name:	Amines, corrosive liquids, n.o.s.
Class:	8
UN ID#:	UN2735
Packing Group:	III

15. REGULATORY INFORMATION

EU. EINECS: on the inventory or in compliance with the inventory

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US Toxic Substances Control Act:	On TSCA Inventory
Australia (Industrial Chemical Notification and Assessment Act)	On the inventory or in compliance with the inventory
Canada	On the inventory or in compliance with the inventory
Japan	On the inventory or in compliance with the inventory
Korea	On the inventory or in compliance with the inventory
Phillipines	On the inventory or in compliance with the inventory
China	On the inventory or in compliance with the inventory
Switzerland	On the inventory or in compliance with the inventory
New Zealand	On the inventory or in compliance with the inventory

16. OTHER INFORMATION

	HMIS III	NFPA
Health:	3	3
Flammability	1	1
Reactivity:	0	0
Personal Protection	0	0