

MATERIAL SAFETY DATA SHEET

1. Product and Company Information

Newport Adhesives and Composites, Inc. **PRODUCT:** NB-1101, NB-1101/331
1822 Reynolds Ave. Prepreg.
Irvine, CA 92614-5714 **MSDS #:** NB-1101, 1101/331
Emergency Phone: 949-253-5680 **Contact Phone:** 949-253-5680
Revision Date: 05/23/05

2. Composition/Information on Ingredients

Chemical Ingredients (% by wt.)

Component	Synonym	CAS #	%
Epoxy Resin Mixture	Epoxy Resins	Proprietary	30-40%
Epoxy Resin Curing Agents	Hardener/Catalyst	Proprietary	<5%
Elastomeric Additives	Elastomers	Proprietary	<5%

Depending on product form, this product may contain one, or more, of the components listed below:

Aramid Fiber	Aramid	26125-61-1	50-70%
Carbon Fiber	Graphite	7440-44-0	50-70%
Glass Fiber	Fiberglass	65997-17-3	40-60%

OSHA Regulatory Status

This material is not classified hazardous under OSHA regulations. This MSDS contains valuable information critical to the safe handling and proper use of this product. This MSDS should be retained and available for employees and other users of the product.

3. Hazards Identification

Emergency Overview: Opaque tacky film on woven or unidirectional fiber. Slight odor. May burn in a fire and emit toxic fumes. Primary entry route of hazard: dermal.

Potential Health Effects: Direct contact may cause irritation to the skin, eyes, and mouth. May cause sensitization and/or dermatitis.

Chronic Effects/Carcinogenicity: Not determined.

Potential Environmental Effects: Not determined.

4. First Aid Measures

Eyes: Flush with water for at least 15 minutes. Seek medical attention if irritation persists.

Skin: Wash affected area with soap and water. Seek medical attention if irritation persists.

Ingestion: Seek medical attention if ingestion occurs.

Inhalation: No adverse effects are anticipated by breathing small amounts of vapor during use. Seek medical attention if irritation occurs.

5. Fire Fighting Measures

Flammable Properties:

Flashpoint: >200°F (93°C).

Flammable Limits:

LFL: Not determined.

UFL: Not determined.

Extinguishing Media: Water, foam, dry chemical, carbon dioxide.

Fire and Explosion Hazards: May burn in fire situations and cause an exothermic reaction. Decomposition and combustion products may be toxic.

Fire fighting Equipment: Protective suit and a NIOSH approved self-contained positive pressure breathing apparatus.

6. Accidental Release Measures

Vacuum or sweep material and place in an appropriate waste container. Avoid direct contact and wear protective gloves and safety goggles.

7. Handling and Storage

Avoid direct contact with skin and clothing. Use with good ventilation, observe good personal hygiene and wash after handling. Store in sealed containers at 0°F (-18°C) to prolong shelf life. Prior to use, allow contents to come to ambient temperature before opening container to avoid absorption of moisture which can cause processing problems.

8. Exposure Control/Personal Protection

Engineering Controls: Provide good general and/or local ventilation or exhaust.

Respiratory Protection: Provide good general and/or local ventilation or exhaust. Use a NIOSH approved respirator suitable for organic vapors, if required.

Skin Protection: Avoid direct contact. Wear protective clothing (long-sleeved overalls, lab coats), and impervious gloves.

Eye Protection: Avoid direct contact. Wear protective safety glasses or goggles.

General Hygiene Consideration:

There are no known health hazards associated with this material when used as recommended. The following general hygiene considerations are recognized as common, good industrial hygiene practices:

Wash hands after use and before eating.

Avoid breathing dust and vapors.

Wear safety glasses.

Exposure Guidelines

Resin: Not determined.

Fiber: 10 mg/m³, dust from cutting or machining.

Impurities: 10 mg/m³, resin/fiber dust from cutting or machining cured parts.

9. Physical and Chemical Properties

Appearance: Opaque tacky film on woven or unidirectional fiber, interleaved with release paper and/or poly film.

Odor: Slight.

Boiling Point: Not applicable.

Vapor Pressure: Not applicable.

Solubility in Water: Not applicable.

Specific Gravity: 1.4-2.0

pH: Not applicable.

Flash Point: >200°F (93°C)

UEL: Not applicable.

LEL: Not applicable.

10. Stability and Reactivity

Stability: Stable at ambient conditions. Rapid polymerization and exothermic reaction may occur at temperatures above 200°F (93°C) with emittance of toxic fumes.

Materials to Avoid: Strong oxidizers, acids, and bases.

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, various organic compounds, ammonia.

Hazardous Polymerization: May occur at temperatures above 200°F (93°C)

11. Toxicological Information

Not established.

12. Ecological Information

Not established.

13. Disposal Considerations

Dispose of in accordance with Federal, State and Local regulations.

14. Transport Information

DOT: Not regulated.

IMO: Not regulated.

IATA: Not regulated.

15. Regulatory Information

Inventory Status: The components of this product are either on the TSCA Inventory or exempt from the Inventory.

CERCLA/Superfund, 40 CFR 117.32: This product contains no reportable quantity substances.

SARA Hazard Category:

Component	CAS#	Concentration	Hazard
Epoxy resins	Various	30-40%	Immediate (acute) and delayed chronic) health hazard.
Hardener/catalyst	Various	< 5%	Acute health hazard.

SARA 313 INFORMATION: This product contains no materials subject to the reportable requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Chemical Name	CAS #	Concentration
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State Regulatory Status:

New Jersey Right-to-Know Hazardous Substance List:

Benzene (trace), epichlorohydrin (trace).

Pennsylvania Right-to-Know Hazardous Substance List:

Benzene (trace), epichlorohydrin (trace).

Massachusetts Right-to-Know Hazardous Substance List:

Benzene (trace), epichlorohydrin (trace).

California Proposition 65:

The following statement is made in compliance with California Safe Drinking and Toxic Enforcement Act of 1986:

This product contains chemicals known to the State of California to cause cancer, or birth defects, or other reproductive harm.

Component	CAS#	Concentration
Benzene	71-43-2	Trace concentration
Epichlorohydrin	106-89-8	Trace concentration
Phenyl glycidyl ether	122-60-1	Trace concentration

16. Other Information:

MSDS Status: Active

MSDS Prepared By: A. Bosch