

MATERIAL SAFETY DATA SHEET

1. Product and Company Information

<p>Newport Adhesives and Composites, Inc. 1822 Reynolds Ave. Irvine, CA 92614-5714 Emergency Phone: 949-253-5680</p>	<p>PRODUCT: Newport LTC 3310 MSDS #: LTC 3310 Contact Phone: 949-253-5680 Revision Date: 5/13/2014</p>
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2. Composition/Information on Ingredients

Chemical Ingredients (% by wt.)

Component	Synonym	CAS #	%
Epoxy Resin Mixture	Epoxy Resins	Proprietary	< 30-40%
Epoxy Resin Curing Agents	Hardeners/Catalysts	Proprietary	< 15%
Elastomer Additives	Elastomers	Proprietary	< 10%

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	50-70%

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). 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: Not a relevant mode of exposure. 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

Wear safety glasses

Exposure Guidelines

Resin: Not determined.

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

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 160°F (70°C) with emittance of toxic fumes.

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

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

Hazardous Polymerization: May occur at temperatures above 160°F (70°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:
CERCLA/Superfund, 40 CFR 117.32:
SARA Hazard Category:

Component	CAS#	Concentration	Hazard
Epoxy resins	Various	30-40%	Immediate (acute) and delayed (chronic) health hazard.

Hardener/catalyst Various < 15% Acute health hazard.

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.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (chronic) Health Hazard	Yes
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

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
2-Butoxyethanol	111-76-2	< 0.002%
1,2,4 Trimethylbenzene	95-63-6	< 0.0004%

State Regulatory Status:

New Jersey Right-to-Know Hazardous Substance List:

Component	CAS#	Concentration	Revision date
- Epichlorohydrin	106-89-8	Trace	1993-04-24
- Naphtha, petroleum hydrodesulfurized heavy	64742-82-1	Trace	
- Hydroxy acetic acide butyl ester (Butyl glycolate)	7397-62-8	Trace	
- 2-Butoxyethanol	111-76-2	< 0.0002%	

Pennsylvania Right-to-Know Hazardous Substance List:

Component	CAS#	Concentration	Revision date
- Epichlorohydrin	106-89-8	Trace	1993-04-24
- Naphtha, petroleum hydrodesulfurized heavy	64742-82-1	Trace	
- Hydroxy acetic acide butyl ester (Butyl glycolate)	7397-62-8	Trace	
- 2-Butoxyethanol	111-76-2	< 0.0002%	

Massachusetts Right-to-Know Hazardous Substance List:

Component	CAS#	Concentration	Revision date
- Epichlorohydrin	106-89-8	Trace	1993-04-24
- 2-Butoxyethanol	111-76-2	< 0.0002%	

California Proposition 65:

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

Warning! This product contains epichlorohydrin, a substance known to the State of California to cause cancer and reproductive toxicity. This product also contains phenyl glycidyl ether, a substance known to the State of California to cause cancer.

Component	CAS#	Concentration
Epichlorohydrin	106-89-8	Trace
Acrylonitrile		Trace
1,3-Butadiene	25068-38-6	Trace
Benzene	71-43-2	Trace
Naphthalene	91-20-3	Trace
Ethylbenzene	100-41-4	Trace
1,4-Dioxane	123-91-1	Trace
Oxirane	122-60-1	Trace



16. Other Information:

MSDS Status: Active
MSDS Prepared By: Kazu Koga