

MATERIAL SAFETY DATA SHEET

QUANTUM COMPOSITES,® inc.

1. **CHEMICAL PRODUCT AND IDENTIFICATION**

PRINT DATE: January 12, 2010

APPROVAL DATE: May 31, 2006

PRODUCT NAME: QC-2150 LD

CHEMICAL FAMILY.....: Phenol Resin

CHEMICAL NAME: Phenol Formaldehyde Copolymer
Engineered Structural Composite

FORMULA: Mixture

MANUFACTURER:
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2. **COMPOSITION/INFORMATION ON INGREDIENTS**

Phenol Formaldehyde Copolymer Engineered Structural Composite (ESC)

100%

HAZARDOUS INGREDIENTS

INGREDIENT NAME / CAS NUMBER	EXPOSURE	LIMITS	CONCENTRATION (%)
*Formaldehyde 50-00-0		0.5-1.5% TLV 1 ppm (in air) skn-rbt LD50:270 mg/kg oral-rat LD50:800 mg/kg 40 ppm STEL	0.5%-0.6%
Glass Fiber 65997-17-3	OSHA: ACGIH:	Total Nuisance Dust 15 mg/cu.m Respirable Nuisance Dust 5 mg/cu.m 10 mg/cu.m TWA N/E STEL	25%
Phenol 108-95-2		2-5% TLV 5 ppm (skin) skn-rbt LD50:850 mg/kg oral-rat LD50:317 mg/kg	6%-8%

(N/E = Not Established)

- Formaldehyde is listed by the International Agency for Research on Cancer as probably carcinogenic to humans, on the basis of animal evidence, but human data is inadequate (IARC group 2B). Listed by the National Toxicology Program as reasonable anticipated to be a carcinogen. Listed by ACGIH as an A2 Industrial Substance.

Suspect of Carcinogenic Potential for Man. OSHA, in its Formaldehyde Standard (20 CFR 1910.48) considers formaldehyde a potential carcinogen.

3. HAZARDS IDENTIFICATION**POTENTIAL HEALTH EFFECTS:**

ROUTE(S) OF ENTRY: Inhalation, skin contact / absorption, eye contact.

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE ...: Irritating to all parts of the respiratory tract. For Formaldehyde – irritation of nose and throat, bronchitis and bronchopneumonia. These symptoms usually appear above 1 ppm. Dermal contact may cause moderate irritation. Chronic exposure to levels above the PEL of styrene may cause kidney or liver damage or central nervous system effects.

INHALATION: Excessive inhalation of vapors can cause nasal & respiratory irritation, central nervous system effects, including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

SKIN CONTACT : Prolonged or repeated contact can cause moderate irritation, defatting, and dermatitis.

EYE CONTACT ...: Can cause severe irritation, redness, tearing, and blurred vision.

INGESTIO.....: Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

CARCINOGENICITY

NTP: See Page 1, Section 2 for Formaldehyde information

IARC: See Page 1, Section 2 for Formaldehyde information

OSHA: See Page 1, Section 2 for Formaldehyde information

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Previous respiratory disorders, dermatitis.

4. FIRST AID MEASURES:

FIRST AID FOR EYES: Flush with clean, lukewarm water (low pressure) for 15 minutes, occasionally lifting eyelids. Get medical attention.

FIRST AID FOR SKIN: Wash affected areas thoroughly with soap and water. Wash contaminated clothing before reuse. Do not wash with organic solvents.

FIRST AID FOR INHALATION: Remove to fresh air. Give artificial respiration if not breathing. Oxygen may be given by qualified personnel if breathing is difficult. Get medical attention.

FIRST AID FOR INGESTION: Consult physician immediately.

5. FIRE FIGHTING MEASURES:

FLASH POINT: N/A.

EXTINGUISHING MEDIA: N/A.

SPECIAL FIRE FIGHTING PROCEDURES : This material is not combustible and presents a low fire hazard. If evaporated to dryness, the resin may burn and generate toxic gases.

6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES: Sweep or place into container.

7. **HANDLING AND STORAGE:**

STORAGE TEMPERATURE: 45°F Maximum.

SHELF LIFE: TBD

SPECIAL SENSITIVITY: Heat above 100°F, Direct sunlight.

HANDLING AND STORAGE PRECAUTIONS : Do not store above 45°F. Store in closed package.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION:**

EYE PROTECTION REQUIREMENTS: Safety glasses.

SKIN PROTECTION REQUIREMENTS: Lint free gloves, to minimize skin contact.

RESPIRATORY/VENTILATION REQUIREMENTS: Local exhaust in handling and fabrication areas. General (dilution) ventilation is usually sufficient.

EXPOSURE LIMITS: Not established for product as whole. Refer to section 2.

9. **PHYSICAL AND CHEMICAL PROPERTIES:**

PHYSICAL FORM: Reinforced sheet with Phenol resin

ODOR: Phenol and formaldehyde odor

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY: 1.5 – 2.0

% VOLATILE BY VOLUME: 5-10%

VAPOR PRESSURE: N/A

VAPOR DENSITY (Air=1).....: N/A

10. **REACTIVITY:**

STABILITY: This is a stable material.

CONDITIONS TO AVOID:: Storage of materials in hot areas.

HAZARDOUS POLYMERIZATION: Will not occur.

DECOMPOSITION PRODUCTS: None, See Section 5.

11. **TOXICOLOGICAL INFORMATION:**

No information available.

12. **ECOLOGICAL INFORMATION:**

No data available.

13. **DISPOSAL METHOD:**

WASTE DISPOSAL METHOD: Waste must be disposed of in accordance with federal, state, and local environmental control regulations. Sanitary land fill is acceptable in many areas. This material can also be incinerated in approved facilities.

14. **TRANSPORTATION INFORMATION:**

D.O.T. SHIPPING NAME: Not Regulated

D.O.T. HAZARD CLASS: None

D.O.T. LABEL: None

D.O.T. PLACARD: None

FREIGHT CLASS BULK: Not Applicable

FREIGHT CLASS PACKAGE: Compounds, molding, containing chopped fibers, filler and resin

PRODUCT LABEL: QC-2150 LD

15. **OTHER INFORMATION:**

DISCLAIMER: The above information is believed to be correct, but does not purport to be all inclusive and shall only be used as a guide. Quantum Composites, inc. will not be held liable for any damages resulting from or with contact of the above mentioned product.