

Cured Thermoset Resin Products Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Article; Cured Thermoset Resin Products

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Fiberglass reinforced plastic (FRP) piping systems; including fittings, adhesives, and resins.

1.3 Details of the supplier of the safety data sheet

- NOV Fiber Glass Systems
17115 San Pedro Avenue, Suite 200
San Antonio, Texas 78232 USA
Tel: 1-210-477-7500
Fax: 1-210-231-5915
E-mail: Mike.Thayer@nov.com

1.4 Emergency telephone number(s)

- 3E Company, 24-Hour Support (Access Code/Contract Number: 333386)
 - USA, Canada 1-888-298-2344
 - Asia, Pacific 1-760-476-3960
 - Europe, Middle East, Africa 1-760-476-3961
 - Americas 1-760-476-3962

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Physical

- Not classified

Health

- Not classified

Environmental

- Not classified

2.2 Label elements

Signal Word(s)

- None

Pictogram(s)

- None

Hazard Statements

- None

Precautionary Statements

- None

2.3 Other Hazards

- PBT and vPvB assessment
 - None of the ingredients are considered to be either PBT or vPvB.
- Warning: May form combustible dust concentrations in air when sanded, grinded, or cut.

SECTION 3: Composition/information on Ingredients

3.1 Substances

- Not applicable

3.2 Mixtures

Chemical Identity	CAS No.	EC No.	Concentration Range (weight %)
Cured Thermoset Resin	Not applicable	Not applicable	30 – 100
Glass Fiber	065997-17-3	266-046-0	0 – 70
Other fillers (refer to specific product SDS)	Various	Various	0 – 25
Substances that do not meet the classification and labeling criteria established under the GHS	Not applicable	Not applicable	Balance

SECTION 4. First-aid measures

Cured thermoset resin products do not pose any significant health hazards related to inhalation, skin contact, eye contact, or ingestion unless the article is disturbed by sanding, cutting, grinding, etc.

4.1 Description of first-aid measures

Inhalation

- Move to fresh air
- If difficulty in breathing or respiratory irritation; seek immediate medical attention
- If breathing has stopped; seek immediate medical attention, perform artificial respiration

Skin contact

- Wash affected area thoroughly with soap and water for at least 20 minutes
- If irritation develops or persists; seek medical attention

Eye contact

- Immediately flush with water for at least 20 minutes
- Remove contact lenses, if present
- If irritation develops or persists, seek medical attention

Ingestion

- Do not induce vomiting unless directed to do so by medical personnel
- Never give anything by mouth to an unconscious person
- If symptoms persist, seek immediate medical attention

4.2 Most Important symptoms and effects, both acute and delayed

Acute

- Dusts may cause temporary mechanical irritation to the eyes, skin, and respiratory tract. Accidental ingestion may cause illness or irritation to the mouth and gastrointestinal tract.

Delayed

- No specific data available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Water spray, alcohol-resistant foam, dry chemical, carbon dioxide.

5.2 Specific hazards arising from the substance or mixture

- Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

5.3 Advice for firefighters

- Wear self-contained breathing apparatus and protective clothing, as necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear appropriate personal protective equipment and clothing to reduce or eliminate contact.

6.2 Environmental precautions

- Cured thermoset resin is generally considered to be an inert solid; no special precautions identified.

6.3 Methods and materials for containment and cleaning up

- Collect spilled material by intrinsically safe (explosion-proof) vacuum or sweeping and place into suitable container for disposal.

6.4 Reference to other sections

- See also, *SECTION 8: Control parameters* and *SECTION 13: Disposal considerations*.
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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- No specific data available.

7.2 Conditions for safe storage, including any incompatibilities

- No specific data available.

7.3 Specific end use(s)

- No additional data available.
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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Glass Fiber (continuous filament glass fibers) ^[1]
CAS No. 065997-17-3

Country	Occupational Exposure Limit (OEL) Values		Legal Basis
	Eight Hour TWA	Fifteen Minute STEL	
Australia	2 mg/m ³ (inhalable dust)	None established	Workplace Exposure Standards for Airborne Contaminants
Canada – British Columbia	1 fiber/cc	None established	Occupational Health and Safety Regulation, Table of Exposure Limits for Chemical and Biological Substances

Canada - Ontario	1 fiber/cc	None established	Regulation 883, Control of Exposure to Biological or Chemical Agents
Canada - Manitoba	1 fiber/cc	None established	Workplace Safety and Health Act, Part 36
Canada - Quebec	1 fiber/cc	None established	Regulation respecting occupational safety and health
Canada - Saskatchewan	1 fiber/cc (respirable fibers) 5 mg/m ³ (inhalable fraction)	3 fibers/cc (respirable fibers) 10 mg/m ³ (inhalable fraction)	The Occupational Safety and Health Regulations
New Zealand	1 fiber/cc	None established	Workplace Exposure Standards and Biological Exposure Indices
Singapore	10 mg/m ³ (fibrous glass dust)	None established	Workplace Safety and Health (General Provisions) Regulations
USA (ACGIH)	1 fiber/cc	None established	None
USA (NIOSH)	3 fiber/cc	None established	NIOSH Pocket Guide to Chemical Hazards (Recommendations Only)

^[1] This material is incorporated into the cured thermoset resin product and exposure via inhalation is not likely to occur unless the product is subjected to finishing operations such as sanding, grinding, cutting, etc.

Particulates not otherwise classified/regulated (PNOC / PNOR) (may be generated if cured thermoset resin product is subjected to sanding, grinding, cutting, etc.)

CAS No. – Not applicable

Country	Occupational Exposure Limit (OEL) Values		Legal Basis
	Eight Hour TWA	Fifteen Minute STEL	
Austria	10 mg/m ³ (inhalable)	None established	Workplace Exposure Standards for Airborne Contaminants
Belgium	10 mg/m ³	None established	limites d'exposition professionnelle – VLEP/ Grenswaarden voor beroepsmatige blootstelling – GWBB
Canada - Alberta	10 mg/m ³ (total) 3 mg/m ³ (respirable)	None established	Occupational Safety and Health Code
Canada – British Columbia	10 mg/m ³ (total dust) 3 mg/m ³ (respirable)	None established	Occupational Health and Safety Regulation, Table of Exposure Limits for Chemical and Biological Substances
Canada - Manitoba	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)	None established	Workplace Safety and Health Act, Part 36
Canada - Ontario	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)	None established	Regulation 883, Control of Exposure to Biological or Chemical Agents
Canada - Quebec	10 mg/m ³ (total dust)	None established	Regulation respecting occupational safety and health
China	3 mg/m ³ (fiberglass reinforced plastic dust)	None established	GBZ 2.1-2007, Occupational exposure limits for hazardous agents in the workplace
Ireland	10 mg/m ³ (inhalable) 4 mg/m ³ (respirable)	None established	Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations
Malaysia	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)	None established	Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations
New Zealand	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)	None established	Workplace Exposure Standards and Biological Exposure Indices
Singapore	10 mg/m ³ (nuisance)	None established	Workplace Safety and Health (General Provisions) Regulations

South Korea	10 mg/m ³	None established	[Need reference]
USA (ACGIH)	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)	None established	None
USA (OSHA)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	None established	29 CFR 1910 Subpart Z, Toxic and Hazardous Substances
United Kingdom	10 mg/m ³ (inhalable) 4 mg/m ³ (respirable)	None established	EH40 Workplace exposure limits

8.2 Exposure controls

The recommendations below should be generally considered when sanding, cutting, grinding, etc. cured thermoset resin products where the possibility of dust generation exists.

Appropriate engineering controls

- Provide adequate general and local exhaust ventilation to control airborne concentrations to below the occupational exposure limit values.
- When sanding, cutting, grinding the cured product, it is recommended that all dust control equipment contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Personal protective equipment

- Eye and face protection
 - Approved safety glasses with side shields (e.g., ANSI Z87, EN166)
- Skin protection
 - Such gloves and/or clothing as to minimize or eliminate the chance of skin contact with generated dust.
- Respiratory protection
 - If ventilation is insufficient to keep airborne concentrations below the occupation exposure limit levels, full or half-mask respirator fitted with particulate filters (for sanding, grinding, cutting, etc. cured material). Filter masks may be of limited use in cases of high or unknown exposure.

Environmental exposure controls

- No specific data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance	Varies by product
- Odor	None
- Odor threshold	No data available
- pH	No data available
- Melting point/freezing point	No data available
- Initial boiling point and boiling range	No data available
- Flash point	Not applicable
	No data available

- Evaporation rate	Not applicable
- Flammability (solid, gas)	Not applicable
- Upper/lower flammability or explosive limits	No data available
- Vapor pressure	No data available
- Vapor density (air = 1)	No data available
- Relative density	No data available
- Solubility(ies)	No data available
- Partition coefficient: n-octanol/water	No data available
- Auto-ignition temperature	No data available
- Decomposition temperature	Not applicable
- Viscosity	Varies by product
- Explosive properties	No data available
- Oxidizing properties	No data available

9.2 Other information

- No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

- No data available.

10.2 Chemical stability

- Product is stable.

10.3 Possibility of hazardous reactions

- Hazardous reactions will not occur.

10.4 Conditions to avoid

- Excessive heat and flames.

10.5 Incompatible materials

- No data available.

10.6 Hazardous decomposition products

- No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

- Data for ingredients were not found or not sufficient for classification.

Skin corrosion/irritation

- Data for ingredients were not found or not sufficient for classification.

Serious eye damage/irritation

- Data for ingredients were not found or not sufficient for classification.

Respiratory or skin sensitization

- Data for ingredients were not found or not sufficient for classification.

Germ cell mutagenicity

- Data for ingredients were not found or not sufficient for classification.

Carcinogenicity

- Data for ingredients were not found or not sufficient for classification.

Reproductive toxicity

- Data for ingredients were not found or not sufficient for classification.

STOT-single exposures

- Respiratory system Irritation possibly if exposed to dusts generated from sanding, cutting, grinding, etc.

STOT-repeated exposures

- Data for ingredients were not found or not sufficient for classification.

Aspiration hazard

- Data for ingredients were not found or not sufficient for classification.
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SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

- Data for ingredients were not found or not sufficient for classification.

Chronic toxicity

- Data for ingredients were not found or not sufficient for classification.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The regulatory information provided below may not be comprehensive.

Canada

Controlled Products Regulation (CPR)

- This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Ingredient Disclosure List (IDL)

- All components of this mixture that are on the IDL above their specified concentration are disclosed in this SDS.

United States

EPCRA			CERCLA	RCRA	CAA	OSHA
Section 302 (EHS) TPQ (LB/KG)	Section 304 RQ (LB/KG)	Section 313	RQ (LB/KG)	P/U Codes	112(r) TQ (LB/KG)	Highly Hazardous Chemical
None of the ingredients are listed						

15.2 Chemical safety assessment

- No chemical safety assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Revision history

Revision Number	Revision Date	Revision Description
1	26-AUG-2014	Initial SDS creation in conformance with OSHA hazard communication standard (29 CFR 1910.1200), Regulation (EC) No. 1907/2006 (REACH), and UN Globally Harmonized System (GHS).

Legend to abbreviations and acronyms used

- ACGIH American Conference of Governmental Industrial Hygienists
- ANSI American National Standards Institute
- CAA Clean Air Act
- CFR Code of Federal Regulations (US)

- EPCRA Emergency Planning and Community Right-to-Know Act
- IARC International Agency for Research on Cancer
- IBC Code International Bulk Chemical Code
- MARPOL Marine Pollution
- NIOSH National Institute for Occupational Safety and Health
- NTP National Toxicological Program
- OSHA Occupational Safety and Health Administration (US)
- PBT Persistent Bioaccumulative and Toxic
- RCRA Resource Conservation and Recovery Act
- vPvB very Persistent and very Bioaccumulative

Key literature references and sources for data

- USEPA. 2006. List of Lists, Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act. EPA 550-B-01-003. October 2006.