
M A T E R I A L S A F E T Y D A T A S H E E T

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 | SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION |
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PRODUCT NAME : ENCORE RAIL SYSTEMS 12000HV EPOXY RESIN PART A
 IDENTIFICATION NUMBER: 20286-R
 PRODUCT USE/CLASS : Epoxy resin

SUPPLIER:

Encore Rail Systems, Inc.
 2350 W. Midway Blvd
 Broomfield, CO 80020
 EMERGENCY: 1-800-424-9300 CHEMTREC
 INFORMATION: 1-866-712-7622

PREPARE DATE: 12/18/09

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 | SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS |
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ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%
01	Amorphous silicon dioxide	112945-52-5	1.0-5.0
02	Acrylic ester	TRADE SECRET	10.0-30.0
03	Neopentyl Glycol Diglycidyl Ether	17557-23-2	1.0-5.0
04	Epoxy resin	TRADE SECRET	60.0-100.0
05	Titanium Dioxide	13463-67-7	1.0-5.0

----- EXPOSURE LIMITS -----

ITEM	ACGIH		OSHA		COMPANY	SKIN
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA	
01	3mg/m3 (RD)	N.E.	5mg/m3 (RD)	N.E.	N.E.	NO
02	N.E.	N.E.	N.E.	N/E	N.E.	NO
03	N.E.	N.E.	N.E.	N/E	N.E.	NO
04	N.E.	N.E.	N.E.	N/E	N.E.	NO
05	10 mg/m3-TD	N.E.	15 mg/m3-TD	N.E.	10 mg/m3-TD	NO

(See Section 16 for abbreviation legend)

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 | SECTION 3 - HAZARDS IDENTIFICATION |
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EMERGENCY OVERVIEW: Harmful if swallowed. Causes skin irritation. May cause allergic skin reaction. Contact may cause eye injury.

ACUTE EFFECTS - EYE CONTACT: Contact may cause injury to eye tissue if not removed promptly.

ACUTE EFFECTS - SKIN CONTACT: Repeated or prolonged contact may cause sensitization. Severe irritant. Prolonged contact may cause chemical burns.

ACUTE EFFECTS - INHALATION: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Vapors and/or aerosols formed at elevated temperatures can be irritating.

ACUTE EFFECTS - INGESTION: Irritating to mouth, throat and stomach, with nausea.

CHRONIC OVEREXPOSURE EFFECTS: *Preexisting pulmonary and dermatological disorders may be aggravated by exposure to hazardous components.

*Neopentyl glycol diglycidyl ether was found to be carcinogenic in skin painting tests on mice. Mutagenic "in-vitro."

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|                               SECTION 3 - HAZARDS IDENTIFICATION          |
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OTHER INFORMATION: Not Applicable.

PRIMARY ROUTE(S) OF ENTRY: INHALATION, SKIN CONTACT, EYE CONTACT, INGESTION,

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|                               SECTION 4 - FIRST AID MEASURES              |
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EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

INHALATION: If symptoms occur, remove to fresh air. Medical personnel may administer oxygen if breathing is difficult. Seek medical attention if symptoms persist.

INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

NOTES TO PHYSICIAN: Treat symptomatically.

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|                               SECTION 5 - FIRE FIGHTING MEASURES          |
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FLASH POINT: 200 F	LOWER EXPLOSIVE LIMIT: N.A.
	UPPER EXPLOSIVE LIMIT: N.A.

AUTOIGNITION TEMPERATURE: No data

EXTINGUISHING MEDIA:FOAM, DRY CHEMICAL, CO2, WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may rupture or explode (due to pressure build-up) when exposed to extreme heat. Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion.

SPECIAL FIREFIGHTING PROCEDURES: Use NIOSH-approved self-contained breathing apparatus and full protective clothing. Use water to cool exposed containers. Water stream directed into fire may cause frothing with subsequent spread of flame.

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|                               SECTION 6 - ACCIDENTAL RELEASE MEASURES      |
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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Reclaim clean material. Wear appropriate protective equipment during cleanup. Absorb with inert material, such as clay. Sweep or shovel into loosely-covered waste container and remove to appropriate waste area. Dispose of in accordance with federal, state, and local regulations. Harmful to aquatic organisms. Prevent entry into drains and/or waterways.

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SECTION 7 - HANDLING AND STORAGE
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HANDLING: Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid contact with eyes, skin, and clothing. FOR INDUSTRIAL USE ONLY.

STORAGE: Store in a cool dry place. Keep container closed when not in use.

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SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION
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ENGINEERING CONTROLS: Local exhaust as needed to control vapor or dust levels to below lowest component TLV.

RESPIRATORY PROTECTION: If TLV/PEL is exceeded, if use is performed in a poorly-ventilated space, or if inhalation effects occur, use NIOSH-approved vapor cartridge respirator in accordance with applicable health and safety regulations and manufacturer's recommendations.

SKIN PROTECTION: Butyl rubber gloves. Neoprene gloves. Nitrile gloves. Supported PVA gloves.

EYE PROTECTION: Chemical splash goggles.

OTHER PROTECTIVE EQUIPMENT: Accessible eye wash and safety shower.

HYGIENIC PRACTICES: Follow good general industrial safety practices during use. Do not smoke or eat during use. DO NOT reuse empty containers without commercial clean or recondition.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES
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BOILING RANGE	: 405 - 500 F	VAPOR DENSITY	: Is heavier than air
ODOR	: Mild nondescript	ODOR THRESHOLD	: No data
APPEARANCE	: White	EVAPORATION RATE:	Is slower than Butyl Acetate
SOLUBILITY IN H2O	: Insoluble	SPECIFIC GRAVITY:	1.1154
FREEZE POINT	: No data	pH @ 0.0 %	: N/A
VAPOR PRESSURE	: No data very lo	VISCOSITY	: High
PHYSICAL STATE	: Liquid		

COEFFICIENT OF WATER/OIL DISTRIBUTION: No data
(See Section 16 for abbreviation legend)

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SECTION 10 - STABILITY AND REACTIVITY
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CONDITIONS TO AVOID: Prolonged exposure to heat.

INCOMPATIBILITY: Reaction with amines and mercaptans in large amounts or under uncontrolled conditions releases considerable heat and may release acrid fumes.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon. Aldehydes and acids from incomplete combustion. Phenolic compounds.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

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 SECTION 11 - TOXICOLOGICAL PROPERTIES
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COMPONENT TOXICOLOGICAL INFORMATION:

----- CHEMICAL NAME -----	----- LD50 -----	----- LC50 -----
Amorphous silicon dioxide	Not Applicable	Not Applicable
Acrylic ester	No information	No information
Neopentyl Glycol Diglycidyl Ether	oral(rat)4.5g/kg	No information
Epoxy resin	Oral-rat=>11 g/kg	No deaths/satd air
Titanium Dioxide	Not Applicable	Not Applicable

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 SECTION 12 - ECOLOGICAL INFORMATION
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ECOLOGICAL TEST DATA: Not Applicable.

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 SECTION 13 - DISPOSAL CONSIDERATIONS
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DISPOSAL METHOD: Review all current federal, state, and local regulations regarding health and disposal for appropriate disposal procedures. For small amounts, mix resin and hardener according to product directions and allow to harden. When cured, product is non-hazardous, and may be placed in industrial or municipal landfill if local regulations permit. Material "as sold" is not regulated as a hazardous waste under federal RCRA regulations. DO NOT landfill free liquid. Fuels blending or incineration of free liquid recommended if permitted.

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 SECTION 14 - TRANSPORTATION INFORMATION
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DOT PROPER SHIPPING NAME: Not regulated

DOT TECHNICAL NAME: N/A

DOT HAZARD CLASS: N/A

HAZARD SUBCLASS: N/A

DOT UN/NA NUMBER: N/A

PACKING GROUP: N/A

RESP. GUIDE PAGE:

INTERNATIONAL SHIPPING NAME: Not considered a dangerous good for transport

INTERNATIONAL ID NUMBER: N/A

IMDG CLASS (1',2"): N/A

IMDG PAGE NUMBER: N/A

IMDG EMS: N/A

IATA CLASS (1',2"): N/A

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 SECTION 15 - REGULATORY INFORMATION
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OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed, and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD CHRONIC HEALTH HAZARD

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 and 40 CFR part 372:

----- CHEMICAL NAME -----	CAS NUMBER	WT/WT % IS LESS THAN
No SARA Section 313 components exist in this product.		

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|                SECTION 15 - REGULATORY INFORMATION                |
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TOXIC SUBSTANCES CONTROL ACT:

The chemical substances in this product are on the TSCA Section 8 Inventory.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

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----- CHEMICAL NAME ----- CAS NUMBER

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No components found.

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: D2B

COMPONENT RCRA CLASSIFICATIONS: Not regulated

COMPONENT RCRA CODES: Not Applicable.

CERCLA RQ VALUE (MINIMUM): None known

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|                SECTION 16 - OTHER INFORMATION                |
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HMIS RATINGS - HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: NONE

REASON FOR REVISION: new product

VOLATILE ORGANIC COMPOUNDS (VOCS): 2 grams/ltr

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

ABBREVIATIONS: ACGIH = American Conference of Governmental Industrial Hygienists; OSHA = US Occupational Health and Safety Administration; UK = United Kingdom; TLV-TWA = Threshold Limit Value-Time Weighted Average (8 hrs); STEL = Short-Term Exposure Limit (15 min); C = Ceiling Value; PEL = Permissible Exposure Limit

DISCLAIMER: To the best of our knowledge, the information contained in this MSDS is accurate or is obtained from sources believed to be accurate. However, no liability, expressed or implied, is assumed for the accuracy or completeness of the information contained herein. Buyer assumes liability in its use of the material.

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<END OF MSDS>

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