

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

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME : Encore Rail Systems, Inc. UV-Cure Epoxy Acrylate
 IDENTIFICATION NUMBER: 61000UV-05,61000UV-125,61000UV-99,61000UV-250 PRODUCT
 USE/CLASS : Coating

Material Shelf Life: 90 days from date of manufacture.

SUPPLIER:

Encore Rail Systems, Inc.
 2300 West Midway Blvd.
 Broomfield, CO 80020
 EMERGENCY: 800-424-9300 CHEMTREC
 INFORMATION: 1-866-712-7622
 DATE GENERATED: 10/18/2013

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Contact areas exposed to sunlight or UV light can cause burns. Contact with eyes may cause injury. Irritating to skin. Potential skin sensitizer. Vapors can be irritating. Toxic to aquatic organisms with long-term effects.

PRIMARY ROUTES OF ENTRY: SKIN CONTACT EYE CONTACT INHALATION

GHS LABEL INFORMATION:

PICTOGRAM:



SIGNAL WORD: **WARNING!**

HAZARD LABEL STATEMENTS:

H304 May be fatal if swallowed and enters airways
 H314 Causes severe skin burns and eye damage
 H317 May cause an allergic skin reaction
 H333 May be harmful if inhaled
 H335 May cause respiratory irritation
 H373 May cause damage to organs through prolonged or repeated exposure
 H411 Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS:

P234 Keep only in original container.
 P264 Wash thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves, clothing, and eye/face protection.
 P235+P410 Keep cool. Protect from sunlight.
 P302 + P352 + P333 + P313 IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice/attention.
 P305 + P351 + P338 + P313 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

CAS NUMBER	CHEMICAL NAME	WT %
none - mix	Modified amine mix	1 - 5%
112945-52-5	Amorphous silicon dioxide	1 - 5%
TRADE SECRET	Acrylate blend	60- 90%

SECTION 4 - FIRST AID MEASURES

EYE CONTACT: Remove from potential exposure to UV light. Flush eye with water for 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. Items which cannot be washed, such as shoes, should be disposed of.

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

INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN: Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: ALCOHOL FOAM, CO₂, DRY CHEMICAL, FOAM, 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.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: SMALL SPILL - Wear gloves and goggles. See Section 8 for type. LARGE SPILL - Wear gloves, boot covers, synthetic apron, and goggles. See Section 8 for type.

ENVIRONMENTAL PRECAUTIONS: Prevent entry into drains and/or waterways. Keep off of soil.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Mark area and keep unnecessary personnel away from spill area. Protect from sunlight if possible. Reclaim clean material. 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. Contact manufacturer for further instructions.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin, and clothing. Remove contaminated clothing and wash before reuse. Contaminated leather articles should be disposed of. If product is heated, process with local ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. DO NOT reuse empty container without commercial clean or recondition. FOR INDUSTRIAL USE ONLY.

STORAGE: Store indoors in a cool dry place under ambient conditions. Keep container closed when not in use.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS

CAS NUMBER	ACGIH		OSHA		SKIN
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	
none - mix	N.E.	N.E.	N.E.	N.E.	NO
112945-52-5	N.E.	N.E.	N.E.	N.E.	NO
none- mix	N.E.	N.E.	N.E.	N.E.	NO

*(TD) = Total Dust *(RD) = Respirable Dust

CAS NUMBER	OEL		IDLH	OTHER LIMIT (SOURCE)
	8 HR	15 MIN		
none - mix	N.E.	N.E.	N.E.	N.E.
112945-52-5	20 million part	N.E.	N.E.	N.E.
none - mix	N.E.	N.E.	N.E.	N.E.

*(TD) = Total Dust *(RD) = Respirable Dust

ENGINEERING CONTROLS: Local exhaust as needed to control vapor or dust levels to below lowest component safe exposure limit.

PERSONAL PROTECTIVE EQUIPMENT: Impervious gloves, arm guards and apron to cover skin. Eye wash and safety shower.

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

SKIN PROTECTION: Butyl rubber gloves. Nitrile gloves. Supported PVA gloves. Arm guards. Synthetic apron.

EYE PROTECTION: Chemical splash goggles or face shield.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

FLASH POINT (DEG C): > 70
 AUTOIGNITION TEMPERATURE : No Data
 LOWER FLAMMABILITY/EXPLOSION LIMIT : No Data
 UPPER FLAMMABILITY/EXPLOSION LIMIT : 7.0

PHYSICAL STATE : Liquid
 SPECIFIC GRAVITY : 1.110
 APPEARANCE : Clear
 ODOR : moderate plastic-like
 ODOR THRESHOLD : No data
 SOLUBILITY IN H₂O : Negligible
 pH @ 100 % : not applicable
 BOILING POINT : No Data
 MELTING/FREEZE POINT: No Data
 VAPOR DENSITY : Heavier than Air
 VAPOR PRESSURE : No Data
 EVAPORATION RATE : Is slower than n-Butyl Acetate
 PARTITION COEFFICIENT (log Pow): No Data

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Prolonged exposure to heat may cause separation. Exposure to sunlight causes polymerization.

INCOMPATIBILITY/MATERIALS TO AVOID: Strong bases or oxidants. Strong Lewis or mineral acids. Exposure to sunlight or UV light causes polymerization.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon.

HAZARDOUS REACTIONS: Will not occur under normal conditions.

CONDITIONS TO AVOID: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

COMPONENT TOXICOLOGICAL INFORMATION

----- CHEMICAL NAME -----	----- TEST DATA -----
Modified amine mix	No Information
Amorphous silicon dioxide	No Information
Acrylate Blend	Oral LD50 (rat) > 2000 mg/kg
Dermal LD50 (rabbit) = 3600 mg/kg	
Primary Irritation Index (PII): 2.25 (Rabbit)	

Eye Irritation value: 7.4 (Rabbit) (Mild)
 Oral LD50: > 2000 mg/kg (Rat)
 Dermal LD50: > 2000 mg/kg (Rabbit)

ACUTE EFFECTS - EYE:

Can cause rapid burns if contact area is exposed to light or UV light. Contact may cause injury to eye tissue if not promptly removed.

ACUTE EFFECTS - SKIN:

Contact causes skin irritation with redness, swelling and scaling.
 Can cause rapid burns if contact area is exposed to light or UV light.
 May be absorbed through skin in harmful amounts.
 Repeated or prolonged contact may cause sensitization.

ACUTE EFFECTS - INHALATION:

Causes respiratory tract irritation.
 Harmful if inhaled.
 Liquid particles breathed into the lungs may cause injury to the lungs, liver, or kidneys.

ACUTE EFFECTS - INGESTION:

Irritating to mouth, throat and stomach, with nausea.
 Harmful if swallowed.
 Ingestion may cause fatigue, muscular weakness, labored breathing.

CHRONIC OVEREXPOSURE/OTHER INFORMATION: Preexisting dermatological disorders may be aggravated by exposure to hazardous components.

Silicon Dioxide Amorphous - The toxicological properties of this product have not been thoroughly investigated. Studies involving germ cells suggest unscheduled DNA synthesis. Studies involving inhalation of the product in rats show tumorigenic effects.

*Acrylate - No evidence of point mutations in the Salmonella bacterial test was observed. Structurally similar acrylate and methacrylate substances showed no evidence of point mutation in the in vitro hprt mutation assay and no evidence of a mutagenic effect was seen when tested in whole animal chromosomal aberration and/or micronucleus assays. In contrast this substance as well as the entire acrylate/methacrylate chemical class produced a consistently positive response when tested in the mouse lymphoma assay and/or other in vitro mammalian cell assays designed to detect clastogenicity. However, the biological relevance of this in vitro response is questioned as these results could not be confirmed in tests on whole mammalian systems. This substance has been shown to cause fetotoxic effects during animal testing only in the presence of maternal toxicity.
 *Acrylate was NOT carcinogenic in an 80-week study in mice. Product was NOT fetotoxic or teratogenic when administered orally to mice at maternally toxic doses.

SECTION 12 - ECOLOGICAL INFORMATION

COMPONENT ECOLOGICAL INFORMATION:

----- CHEMICAL NAME -----	----- TEST DATA -----
Modified amine mix	No Information
Amorphous silicon dioxide	No Information
Acrylate Blend	LC50-96hr-fish (Rainbow trout) = 4.6-10 mg/L

SUMMARY OF ECOLOGICAL INFORMATION:

BIOACCUMULATION POTENTIAL: No information indicating bioaccumulation

PERSISTENCE AND DEGRADABILITY: No information indicating persistence or degradability

AQUATIC TOXICITY: H411 Toxic to aquatic life with long lasting effects

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Review all current federal, state, and local regulations regarding health and disposal for appropriate disposal procedures. 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. Keep away from heat and direct sunlight. Contact manufacturer for further information.

SECTION 14 - TRANSPORTATION INFORMATION

INTERNATIONAL SHIPPING NAME: Not considered a dangerous good for transport
ID NUMBER: N/A
PACKING GROUP: N/A
PRIMARY HAZARD CLASS: N/A
HAZARD SUBCLASS: N/A
INTERNATIONAL EMS NO: N/A
NA EMERGENCY RESPONSE GUIDE NO: N/A

SECTION 15 - REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65 STATEMENT: NONE

CERCLA - SARA HAZARD CATEGORY:

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

IMMEDIATE HEALTH HAZARD

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 and 40 CFR part 372: None

TOXIC SUBSTANCES CONTROL ACT:

COMPONENTS SUBJECT TO SECTION 4 TESTING/SNUR: None

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

SECTION 12(B) EXPORT REPORTING: This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States: none

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 CODES: NONE

CERCLA RQ VALUE (MINIMUM): NONE

REACH SUBSTANCE(S) OF VERY HIGH CONCERN: None added or known to be present.

RoHS SUBSTANCE(S): None added or known to be present.

ODS/MONTREAL PROTOCOL SUBSTANCE(S): None added or known to be present.

PRODUCT/TOTAL VOC (CALCULATED): <10 grams/ltr

COATING/REGULATORY VOC (less water and exempt solvents - calculated): <10 g/l

SECTION 16 - OTHER INFORMATION

NFPA/THIS RATINGS - HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

ABBREVIATIONS:

N.A. - Not Applicable

N.E. - Not Established

N.D. - Not Determined

ACGIH = American Conference of Governmental Industrial Hygienists

OSHA = US Occupational Health and Safety Administration

TLV-TWA = Threshold Limit Value-Time Weighted Average (8 hrs)

STEL = Short-Term Exposure Limit (15 min)

C = Ceiling Value

PEL = Permissible Exposure Limit

OEL = Occupational Exposure Limit

IDLH = Immediately Dangerous to Life and Health

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.