



SAFETY DATA SHEET

EMVB PART B

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EMVB PART B
MANUFACTURER: Penntek Industrial Coatings
STREET ADDRESS: 7850 Lakville BLVD
CITY, STATE, ZIP: Lakeville, MN 55044
IFORMATION PHONE: 724-483-9300
EMERGENCY PHONE: INFOTRAC 800-535-5053
PREPARED BY: Kyle Baynes
DATE REVISED: 06/28/21

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification:

Acute oral toxicity category 4, Acute dermal toxicity category 4, Skin corrosion/irritation category 1B, skin sensitizer category 1B, Serious eye damage category 1, Acute toxicity inhalation category 4, Acute hazard to aquatic environment category 3, Chronic hazards to aquatic environment category 2

GHS Label Elements and Precautionary Statements:

Hazard pictograms:



Hazard Statements:

Warning: Harmful if swallowed
Warning: Harmful in contact with skin
Danger: Causes severe skin burns and eye damage.
Warning: May cause an allergic skin reaction
Danger: Causes serious eye damage
Warning: Harmful if inhaled
Harmful to aquatic life
Toxic to aquatic life with long lasting effects



SAFETY DATA SHEET

EMVB PART B

Precautionary statements:

P102 Keep out of reach of children.

P103 Read label before use

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe dust/fume/gas/mist/vapours/spray P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P271 Use only outdoors or in a well-ventilated area

P273 Avoid release to the environment.

Response:

P301 + P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.

P330 Rinse mouth

P302 + P352 IF ON SKIN: wash with plenty of soap and water

P312 Call a POISON CENTER or doctor/physician if you feel unwell

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P363 Wash contaminated clothing before reuse.

P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician.

P321 If skin irritation or burns develop, Call a doctor/physician .

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.

P310 If in eyes, immediately call a POISON CENTER or doctor/physician.

P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws.



SAFETY DATA SHEET

EMVB PART B

HMIS HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0 PERSONAL PROTECTIVE
 EQUIPMENT: G

POTENTIAL HEALTH EFFECTS

EYES:

WILL CAUSE BURNS TO THE EYES. HIGH VAPOR CONCENTRATIONS CAN CAUSE SEVERE IRRITATION TO THE EYES.

SKIN:

CAN CAUSE SKIN IRRITATION OR POSSIBLE BURNS TO THE SKIN

INGESTION:

LIQUID CAN CAUSE SEVERE DAMAGE TO MUCOUS MEMBRANES IF SWALLOWED.

INHALATION:

HIGH CONCENTRATIONS OF VAPOR CAN CAUSE IRRITATION TO THE RESPIRATORY TRACT, NAUSEA, AND DIZZINESS.

HEALTH HAZARDS (ACUTE AND CHRONIC):

PROLONGED OR REPEATED EXPOSURE MAY CAUSE ASTHMA AND SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

NO LISTED INGREDIENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	Chemical Name	WEIGHT %
9046-10-0	Polyoxypropylene diamine	10-30
98-54-4	Paratertiarybutylphenol	5-10
1477-55-0	Benzene-1,3-dimethanamine (MXDA)	7-13
90-72-2	TRIS-2,4,6-dimethylaminomethylphenol	1-5
100-51-6	BENZYL ALCOHOL	10-30
2530-83-8	3-AMINOMETHYL-3,5,5-TRIMETCYCLOHEXANEHYL	10-30
69-72-7	2-HYDROXYBENZOIC ACID	1-5
25620-58-0	TRIMETHYLHEXAMETHYLENEDIAMINE	3-7



SAFETY DATA SHEET

EMVB PART B

*INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372. Benzene-1,3-dimethaneamine (MXDA) ACGIH Ceiling = 0.1mg/m³ (skin) A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact.

SECTION 4: FIRST AID MEASURES

EYES:

IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE LIFTING UPPER AND LOWER LIDS. GET IMMEDIATE MEDICAL ASSISTANCE

SKIN:

FLUSH SKIN WITH WATER FOR AT LEAST 15 MINUTES AND REMOVE ALL CONTAMINATED CLOTHING IMMEDIATELY. GET MEDICAL ATTENTION IF REDDENING OR SWELLING OCCURS.

INGESTION:

DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER OR MILK TO DRINK IF VICTIM IS CONSCIOUS. GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION:

REMOVE TO FRESH AIR IF EFFECTS PERSIST AND ADMINISTER OXYGEN IF NECESSARY.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR,
(% by volume)

UPPER: not available
LOWER: not available

FLASH POINT: 230+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO₂, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:

TOXIC FUMES WILL BE EVOLVED WHEN THIS MATERIAL IS INVOLVED IN A FIRE. A SELF-CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR FIRE FIGHTING. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NO UNUSUAL FIRE HAZARDS KNOWN.



SAFETY DATA SHEET

EMVB PART B

SECTION 11 - TOXICOLOGICAL INFORMATION

For the components: AMINO TERMINATED POLYETHER CAS# 9046-10-0, 3-Aminomethyl -3,5,5-Trimethyl Cyclohexane CAS# 2855-13-2, Paratertiarybutylphenol, CAS# 98-54-4, Benzene-1,3-dimethanamine (MXDA) CAS# 1477-55-0, TRIS-2,4,6-dimethylaminomethylphenol CAS# 90-72-2: Ingestion: As product: Single dose oral LD50 has not been determined. For the component(s) tested: Estimated. LD50, Rat > 2,000 mg/kg. Dermal: As product: The dermal LD50 has not been determined. For component(s) tested. Estimated. LD50, Rabbit > 2,000 mg/kg. Inhalation: The LC50 has not been determined. Eye damage/eye irritation: May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur. Skin corrosion/irritation: Brief contact may cause skin burns. Symptoms may include pain, severe local redness and tissue damage. Sensitization Skin: A component in this mixture has caused allergic skin reactions in humans. Contains component(s) which have caused allergic skin sensitization in guinea pigs. Respiratory: No relevant data found. Repeated Dose Toxicity: For the component(s) tested: In animals, effects have been reported on the following organs: Respiratory tract. Lung. Chronic Toxicity and Carcinogenicity: No relevant information found. Developmental Toxicity: Contains component(s) which did not cause birth defects in laboratory animals. Reproductive Toxicity: In animal studies on component(s), effects on reproduction were seen only at doses that produced significant toxicity to the parent animals. Genetic Toxicology: Contains a component(s) which were negative in in vitro genetic toxicity studies. Contains component(s) which were negative in animal genetic toxicity studies.

Component Benzyl Alcohol: Inhalation LC50 (4hr) >4178 mg/l (rat), Dermal LD50 2000 mg/kg (rabbit) Rats exposed to 800 mg/kg for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No observed Adverse effect level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in two year study with rats and mice.

Component CAS# 2855-13-2: Oral LD50 rat 1030 mg/kg, Skin irritation - Corrosive subcategory 1C where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days. Eye irritation - Risk of serious damage to eyes. Product Sensitization (Magnusson- Kingman test) guinea pig: may cause sensitization by skin contact. Product Teratogenicity oral rat NOEL (no observed effect level) 250 mg/kg

Component CAS# 69-72-7: Acute Oral Toxicity LD50 (rat) = 891 mg/kg (behavioral somnolence (general depressed activity, Behavioral muscle weakness)). Acute Inhalation LC50 (rat) >900 mg/m³, 1 hr. Acute Dermal LD50 (rabbit) >10,000 mg/kg. Skin Irritation (rabbit) - mild skin irritation -24hr. Eye Irritation (rabbit) - severe eye irritation.

Component Trimethylhexamethylenediamine: Acute oral toxicity LD50 = 910 mg/kg (rat); Component is a serious eye irritant and can cause damage to the eyes.



SAFETY DATA SHEET

EMVB PART B

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

AVOID CONTACT WITH MATERIAL. WEAR THE APPROPRIATE SAFETY EQUIPMENT. STOP SPILL AT SOURCE, DYKE AREA TO PREVENT SPREADING. PUMP LIQUID TO SALVAGE TANK. TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBENT AND PLACE IN DISPOSAL CONTAINERS.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS. RESEAL PARTIALLY USED CONTAINERS. PROPERLY LABEL ALL CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. OBSERVE CONDITIONS OF GOOD INDUSTRIAL HYGIENE AND SAFE WORKING PRACTICES.

OTHER PRECAUTIONS:

MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS OF ALL COMPONENTS TO BECOME FAMILIAR WITH ALL HAZARDS PRIOR TO USING THIS PRODUCT.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

NIOSH APPROVED RESPIRATOR PROTECTION REQUIRED IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROLS. FOR EMERGENCIES A SELF-CONTAINED BREATHING APPARATUS OR A FULL FACE RESPIRATOR IS RECOMMENDED.

VENTILATION:

AVOID BREATHING VAPORS. VENTILATION MUST BE SUFFICIENT TO CONTROL VAPORS.

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES - NEOPRENE OR RUBBER.

EYE PROTECTION:

SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.

WORK HYGIENIC PRACTICES:

OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATONAL EXPOSURE LIMIT VALUES.



SAFETY DATA SHEET

EMVB PART B

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: AMBER CLEAR LIQUID WITH AMINE ODOR.

BOILING POINT OR RANGE OF: >200C

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H₂O = 1): 1.05

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: : Soluble

Odor Threshold: N/A

pH: N/A

Melting point/freezing point: N/A

Vapor Pressure: <5 ghPa @ 50C

Auto Ignition Temperature: N/A

Partition Coefficient: n-octanol/water: N/A

Decomposition Temperature: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY:

STABLE

CONDITIONS TO AVOID (STABILITY):

AVOID EXCESSIVE HEAT OR OPEN FLAMES.

INCOMPATIBILITY (MATERIAL TO AVOID):

CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS ACIDS OR MINERAL ACIDS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

CO₂, ALDEHYDES, ACIDS. REACTION WITH SOME CURING AGENTS CAN GENERATE LARGE AMOUNTS OF HEAT.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR



SAFETY DATA SHEET

EMVB PART B

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Component: Polyoxypropylene diamine: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). Fish Acute & Prolonged Toxicity: LC50, golden orfe (*Leuciscus idus*), 48 h: > 220 mg/l

Component: 3-Aminomethyl-3,5,5-trimethylcyclohexylamine (isophoronediamine): Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested). Fish Acute & Prolonged Toxicity: LC50, golden orfe (*Leuciscus idus*), static renewal, 96 h: 110 mg/l. Aquatic Invertebrate Acute Toxicity: EC50, water flea *Daphnia magna*, 48 h, immobilization: 23 mg/l. Aquatic Plant Toxicity: EbC50, alga *Scenedesmus sp.*, biomass growth inhibition, 72 h: 37 mg/l. Toxicity to Micro-organisms EC10; bacteria, 18 h: 1,120 mg/l. Aquatic Invertebrates Chronic Toxicity Value: water flea *Daphnia magna*, 21 d, number of offspring, NOEC: 3 mg/l, LOEC: 10 mg/l.

Component: P-tert-butylphenol Product Name: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested). Fish Acute & Prolonged Toxicity: LC50, golden orfe (*Leuciscus idus*), 48 h: 1.6 mg/l. Aquatic Invertebrate Acute Toxicity: EC50, water flea *Daphnia magna*, 48 h, immobilization: 3.9 - 6.7 mg/l. Aquatic Plant Toxicity: EC50, green alga *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum*), biomass growth inhibition, 72 h: 14 - 22.7 mg/l. Toxicity to Micro-organisms: EC50; bacteria, 16 h: 227 mg/l. Aquatic Invertebrates Chronic Toxicity Value: water flea *Daphnia magna*, static renewal, 21 d, number of offspring, NOEC: 0.73 mg/l

Component: 1,3-Benzenedimethanamine: Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested). Fish Acute & Prolonged Toxicity: LC50, golden orfe (*Leuciscus idus*), 96 h: 75 mg/l

Aquatic Invertebrate Acute Toxicity: EC50, water flea *Daphnia magna*, static, 48 h, immobilization: 15.2 mg/l. Aquatic Plant Toxicity: EC50, alga *Scenedesmus sp.*, static, biomass growth inhibition, 72 h: 12mg/l

Component: 2,4,6-Tris[(dimethylamino)methyl]phenol: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms. Fish Acute & Prolonged Toxicity: LC50, rainbow trout (*Oncorhynchus mykiss*), static, 96 h: 180 - 240 mg/l.

Component Benzyl Alcohol: EC50 (48hr) 400 mg/l *Daphnia Magna*, EC50 (72hr) 2600 mg/l Algae, Biodegradation BOD2 62. Slightly or not bioaccumulative. Toxicity to fish: LC50 (96 hr) 10 mg/l Bluegill sunfish (*Lepomis macrochirus*), LC50 (96hr) 460 mg/l Fathead minnow (*Pimephales promelas*), Toxicity to Algae: IC50 (72hr) 700 mg/l

Component CAS# 2855-13-2: Biodegradability 42% and is not readily biodegradable. Bioaccumulation: - no significant accumulation of the substance in organisms is to be expected. Mobility: The soil mobility of the substance is only minimally affected by adsorption to soil components. Toxicity to fish: LC50 *Lauciscus idus* 110 mg/l (96hr). Toxicity to *Daphnia* NOEC 3 mg/l (504hr). EC50 *Daphnia magna* 23 mg/l (48 hr). ErC50 *scenedesmus subspicatus* 50 mg/l (72 hr). NOEC *scenedesmus subspicatus* 1.5 mg/l (72 hr). Toxicity to bacteria: EC10 *Pseudomonas putida* 1120 mg/l (18 hr).

Component CAS# 69-72-7: Toxicity to Fish LC50 (*Leuciscus idus* - 96 mg/l. Toxicity to *Daphnia magna* - 105mg/l, 24 hr. Component Mutagenic Effects: Mutagenic for bacteria and/or yeast. Developmental toxicity: Classified reproductive system toxin/female, development toxin possible.

Component Trimethylhexamethylenediamine: Biodegradability: not readily biodegradable (7% method EC79/831). Toxicity to fish LC50 = 174mg/l (48h) (*Leuciscus idus melanotus*). Toxicity to *Daphnia* EC50 - 31.5 mg/l (24h). Toxicity to algae EC50 = 29.5 mg/l (72hr) (*scenedesmus subpicatus*). Toxicity to bacteria EC10 = 72 mg/l (16hr) (*Pseudomonas putida*).



SAFETY DATA SHEET

EMVB PART B

SECTION 13: WASTE DISPOSAL

Waste Disposal

DISPOSE OF MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT Information:

UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS Polyoxypropylene Diamine, 1,3-Benzenedimethanamine), 8, PG III,

IMDG Information:

UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS Polyoxypropylene Diamine, 1,3-Benzenedimethanamine), 8, PG III, MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

For the components: **AMINO TERMINATED POLYETHER CAS# 9046-10-0, 3-Aminomethyl -3,5,5-Trimethyl Cyclohexane CAS# 2855-13-2, Paratertiarybutylphenol, CAS# 98-54-4, Benzene-1,3-dimethanamine (MXDA) CAS# 1477-55-0, TRIS-2,4,6-dimethylaminomethylphenol CAS# 90-72-2:** OSHA Hazard Communication Standard: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. 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. California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute. US. Toxic Substances Control Act: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30. All Components are on the Canadian DSL list.

Component Benzyl Alcohol: E20/22 Harmful by inhalation and if swallowed. On TSCA list, on DSL Canada

Component CAS# 2855-13-2: Acute health hazard. Ingredients on TSCA. International Chemical status listed/registered - EINECS/ELINCS, DSL, AICS, MITI, TCOL, PICCS, China, New Zealand.

Component CAS# 69-72-7: Component is on the Pennsylvania and New Jersey right to know lists. Component is on the TSCA and Canada DSL lists.

COMPONENT TRIMETHYLHEXAMETHYLENEDIAMINE: Component is on the TSCA list as well as the Canada DSL, EINECS, AICS, EINCS, ECL, SEPA, PICCS lists.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.