Material Safety Data Sheet

Epoxy.com Product #693

Reviewed on 01/13/2010

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•	1 Identification of substance:
	Product details:
•	Product details:
•	Trade name: <u>Epoxy.com Product #693</u> Application of the substance / the preparation Coating
•	Manufacturer/Supplier:
	Epoxy.com
	A Division of Epoxy Systems, Inc.
	20774 W. Pennsylvania Ave. Dunnellon, Fl 34431
•	Tel.: 352-489-1666
	Fax: 352-489-1625
•	Information department: Norman L. Lambert, Jr.
•	Emergency information: 800-633-8253
•	2 Composition/Data on components:
•	Chemical characterization
•	
	• • •
	Dangerous components:
	80-62-6 methyl methacrylate
	50-100 %
	Xi, F; R 11-37/38-43
	EINECS: 201-297-1
	38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol
	< 2.5 %
	T, Xi; R 25-36-52/53 EINECS: 254-075-1
	123-81-9 ethylene di(S-thioacetate)
	123 01 9 echytene di (5 chitoacetate)

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< 0.5 %
             T, Xi, N; R 23/24/25-36/38-51/53
             EINECS: 204-653-4
• Additional information
  For the wording of the listed risk phrases refer to
  section 16.
  3 Hazards identification
• Hazard description:
  Xi Irritant
    Highly flammable
  F
• Information pertaining to particular dangers for man
  and environment
  The product has to be labeled due to the calculation
  procedure of the "General Classification guideline for
  preparations of the EU" in the latest valid version.
          Highly flammable.
  R 11
  R 37/38 Irritating to respiratory system and skin.
  R 43
         May cause sensitization by skin contact.

    Classification system

    NFPA ratings (scale 0-4)

  Health = 1
  Fire = 3
  Reactivity = 0
  4 First aid measures
• General information
  Immediately remove any clothing soiled by the product.
  Take affected persons out into the fresh air.
• After inhalation
  Take affected persons into fresh air and keep quiet.
  Seek medical treatment in case of complaints.
• After skin contact
  Immediately wash with water and soap and rinse
  thoroughly.
  If skin irritation continues, consult a doctor.
• After eye contact
  Rinse opened eye for several minutes under running
  water. Then consult a doctor.
• After swallowing Seek immediate medical advice.
• Information for doctor
  No particular measures are known - treat according to
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symptoms.
• The following symptoms may occur: Headache
  5 Fire fighting measures
• Suitable extinguishing agents
  CO2, sand, extinguishing powder. Do not use water.
• For safety reasons unsuitable extinguishing agents
  Water with full jet.
• Special hazards caused by the material, its products
  of combustion or
    resulting gases:
  Formation of toxic gases is possible during heating or
  in case of fire.
• Protective equipment:
  Do not inhale explosion gases or combustion gases.
• Additional information
  Dispose of fire debris and contaminated fire fighting
  water in accordance with official regulations.
  6 Accidental release measures
• Person-related safety precautions:
  Wear protective equipment. Keep unprotected persons
  away.
  Keep away from ignition sources
  Ensure adequate ventilation
• Measures for environmental protection:
  Do not allow product to reach sewage system or any
  water course.
  Do not allow to penetrate the ground/soil.
• Measures for cleaning/collecting:
  Absorb with liquid-binding material (sand, diatomite,
  acid binders, universal binders, sawdust).
  Ensure adequate ventilation.
  Collect in a suitable container and dispose of as
  described at paragraph 13.
• Additional information: Clean the accident area
  carefully.
  7 Handling and storage
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Handling

    Information for safe handling:

  Keep receptacles tightly sealed.
  Store in cool, dry place in tightly closed
  receptacles.
  Ensure good interior ventilation, especially at floor
  level. (Fumes are heavier than air).
• Information about protection against explosions and
  fires:
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
  Fumes can combine with air to form an explosive
  mixture.
  Flammable gas-air mixtures may be formed in empty
  receptacles.
• Storage
• Requirements to be met by storerooms and receptacles:
  Store in a cool location.
  Keep containers securely closed and dry, store at 5 -
  20°C.
  Store only in the original receptacle.
  Provide floor trough without outlet.
• Information about storage in one common storage
  facility:
  Store away from oxidizing agents.
• Further information about storage conditions:
  Keep receptacle tightly sealed.
  Store in cool, dry conditions in well sealed
  receptacles.
  Store only outside or in explosion proof rooms.
  8 Exposure controls and personal protection
• Additional information about design of technical
  systems:
  No further data; see item 7.
  Components with limit values that require monitoring
  at the workplace:
  80-62-6 methyl methacrylate (50-100%)
  PEL: 410 mg/m<sup>3</sup>, 100 ppm
  REL: 410 mg/m<sup>3</sup>, 100 ppm
  TLV: Short-term value: 410 mg/m<sup>3</sup>, 100 ppm
       Long-term value: 205 mg/m<sup>3</sup>, 50 ppm
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• Additional information:
  The lists that were valid during the creation were
  used as basis.

    Personal protective equipment

• General protective and hygienic measures
  Keep away from foodstuffs, beverages and feed.
  Wash hands before breaks and at the end of work.
  Do not inhale gases / fumes / aerosols.
  Avoid contact with the eyes and skin.
  Store protective clothing separately.
  Immediately remove all soiled and contaminated
  clothing
• Breathing equipment:
  In case of brief exposure or low pollution use
  respiratory filter device. In case of intensive or
  longer exposure use respiratory protective device that
  is independent of circulating air.
 Recommended filter device for short term use:
  Combination filter A-P2

    Protection of hands:

  Only use chemical-protective gloves with CE-labeling
  of category III.
  The glove material has to be impermeable and resistant
  to the product/ the substance/ the preparation.
  Selection of the glove material on consideration of
  the penetration times, rates of diffusion and the
  degradation
• Material of gloves
  Butyl rubber, BR
  Nitrile rubber, NBR
  Recommended thickness of the material: >= 0.5 mm
  The selection of the suitable gloves does not only
  depend on the material, but also on further marks of
  quality and varies from manufacturer to manufacturer.
  As the product is a preparation of several substances,
  the resistance of the glove material can not be
  calculated in advance and has therefore to be checked
  prior to the application.
• Penetration time of glove material
  The exact break through time has to be found out by
  the manufacturer of the protective gloves and has to
  be observed.
• Not suitable are gloves made of the following
  materials:
  Leather gloves
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Strong gloves • Eye protection: Tightly sealed goggles. • Body protection: Protective work clothing. 9 Physical and chemical properties: • General Information • Form: Viscous • Color: bluish Cloudy • **Odor:** Ester-like Value/Range Unit Method • Change in condition • Melting point/Melting range: undetermined 100°C • Boiling point/Boiling range: 10°C • Flash point: 430°C • Ignition temperature: • Auto igniting: Product is not self-igniting. • Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible. • Explosion limits: 2.1 Vol % • Lower: 12.5 Vol % • Upper: • Vapor pressure: at 20°C 47 hPa • Density: at 20°C l g/cm³ • Solubility in / Miscibility with Not miscible or • Water: difficult to mix • Viscosity: at 23°C • kinematic: 40 s ISO 4 mm

10 Stability and reactivity

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• Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
• Materials to be avoided:
  acids
  strong oxidizing agents
• Dangerous reactions
  Violent reactions with strong alkalis and oxidizing
  agents
  Reacts with amines
• Dangerous products of decomposition:
  in the event of fire:
  toxic gases and vapours
  Flammable gases/vapors
 11 Toxicological information
• Acute toxicity:
  LD/LC50 values that are relevant for classification:
  80-62-6 methyl methacrylate
  Oral: LD50: > 5000 mg/kg (rat)
  Dermal: LD50: > 5000 mg/kg (rab)
  Inhalative: LC50/4 h: 7093 mg/l (rat)
  38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol
  Oral: LD50: 100 mg/kg (rat)
  123-81-9 ethylene di (S-thioacetate)
  Oral: LD50: 330 mg/kg (rat)
• Primary irritant effect:
• on the skin: Irritant to skin and mucous membranes.
• on the eye: Irritating effect.
• Sensitization: Sensitization possible through skin
  contact.
• Additional toxicological information:
  The product shows the following dangers according to
  the calculation method of the General EU
  Classification Guidelines for Preparations as issued
  in the latest version: Irritant
 12 Ecological information:
• Ecotoxical effects: Not determined
  Aquatic toxicity:
  80-62-6 methyl methacrylate
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BSB5-Wert: 0.14 g/g (-)
  ECO: 100 mg/l (Pseudomonas putida)
  EC3: (192h) 37 mg/l (Scenedesmus quadicauda)
  EC50: (96h) 170 mg/l (Selenastrum capricornutum)
  EC50: (48h) 69 mg/l (daphnia)
  LC50: 350 mg/l (Leuciscus idus)
  LC50 (96h): >79 mg/l (Onchorhynchus mykiss)
  LC50 (96h): 232 mg/l (Lepomis macrochirus (bluegill))
  LC50 (96h): 277 mg/l (Goldfish)
  38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol
  BSB-5: 11 mg O2/g (-)
  CSB: 2360 mg O2/g (-)
  EC50: (48h) 28.8 mg/l (Daphnia magna)
  123-81-9 ethylene di (S-thioacetate)
  LC50(48h): 4.85 mg/l (fish)
• General notes:
  Water hazard class 2 (German Regulation) (Self-
  assessment): hazardous for water.
  Do not allow product to reach ground water, water
  course or sewage system.
 13 Disposal considerations
• Product:
• Recommendation
  Must be specially treated adhering to official
  regulations.
• Uncleaned packagings:
• Recommendation:
  Disposal must be made according to official
  regulations.
 14 Transport information
• DOT regulations:
• Hazard class:
                             3
• Identification number:
                             UN1866
• Packing group:
                             ΙI
• Proper shipping name (technical name):
                             RESIN SOLUTION
• Label
                             3
• Land transport ADR/RID (cross-border)
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• ADR/RID class: 3 (F1) Flammable liquids 33 • Danger code (Kemler): • UN-Number: 1866 • Packaging group: ΤТ • Description of goods: 1866 RESIN SOLUTION • Maritime transport IMDG: • IMDG Class: 3 • UN Number: 1866 Label 3 • Packaging group: ΙI • EMS Number: F-E,S-E • Marine pollutant: No • Propper shipping name: RESIN SOLUTION (METHYL METHACRYLATE MONOMER, STABILIZED) • Air transport ICAO-TI and IATA-DGR: • ICAO/IATA Class: 3 • UN/ID Number: 1866 • Label 3 • Packaging group: ΙI • Propper shipping name: RESIN SOLUTION *15 Regulations • Cancerogenity categories EPA (Environmental Protection Agency) 80-62-6 methyl methacrylate: NL 111-76-2 2-butoxyethanol: CBD IARC (International Agency for Research on Cancer) 80-62-6 methyl methacrylate: 3 9011-14-7 Acrylglaspulver: 3 128-37-0 2,6-di-tert-butyl-p-cresol: 3 111-76-2 2-butoxyethanol: 3 NTP (National Toxicology Program) None of the ingredients is listed. TLV (Threshold Limit Value established by ACGIH) 80-62-6 methyl methacrylate: A4 128-37-0 2,6-di-tert-butyl-p-cresol: A4 111-76-2 2-butoxyethanol: A3 MAK (German Maximum Workplace Concentration) 128-37-0 2,6-di-tert-butyl-p-cresol: 4 111-76-2 2-butoxyethanol: 4 NIOSH-Ca (National Institute for Occupational Safety

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and Health)
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None of the ingredients is listed.
  OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.
• Markings according to EU guidelines:
  The product has been classified and marked in
  accordance with EU Directives / Ordinance on Hazardous
  Materials
• Code letter and hazard designation of product:
  Xi Irritant F Highly flammable
• Hazard-determining components of labeling: methyl
  methacrylate
• Risk phrases:
  11
        Highly flammable.
  37/38 Irritating to respiratory system and skin.
       May cause sensitization by skin contact.
  43
• Safety phrases:
       Keep away from sources of ignition - No smoking.
  16
  23
       Do not breathe gas/fumes/vapor/spray.
       Avoid contact with skin.
  24
  33
        Take precautionary measures against static
  discharges.
  37
        Wear suitable gloves.
        This material and its container must be disposed
  60
  of as hazardous waste.
• National regulations
• Technical instructions (air):
• VOC USA % 0.1 g/l / 0.00 lb/gl
• Water hazard class:
  Water hazard class 2 (Self-assessment): hazardous for
  water.
• Sara
   Section 355 (Exremely hazardous substances):
  None of the ingredients is listed.
   Section 313 (Specific toxic chemical listings):
  80-62-6 methyl methacrylate
  TSCA (Toxic Substances Control Act):
     80-62-6 methyl methacrylate
  21245-02-3 2-ethylhexyl 4-(dimethylamino)benzoate
   9011-14-7 Acrylglaspulver
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2082-81-7 1,4-Butandioldimethacrylat
3077-12-1 2,2'-[(4-methylphenyl)imino]bisethanol
Paraffine
31570-04-4 Tris(2,4-di-tert-butylphenyl)phosphit
Chemicals known to cause cancer:
None of the ingredients is listed.
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• 16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Changes made since last issue dated 17.10.2006 at the following points: *

• Relevant R-phrases

11 Highly flammable. 23/24/25 Toxic by inhalation, in contact with skin and if swallowed. 25 Toxic if swallowed. 36 Irritating to eyes. 36/38 Irritating to eyes and skin. 37/38 Irritating to respiratory system and skin. May cause sensitization by skin contact. 43 51/53 Toxic to aquatic organisms, may cause longterm adverse effects in the aquatic environment Harmful to aquatic organisms, may cause long-52/53 term adverse effects in the aquatic environment

• * Data compared to the previous version altered.