

PAINTCOR

SUPREME QUALITY *From 2086*

EPOXI PRIME

Material Safety Data

PAINTCOR CC

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1. Product Identification:

Product Name: **EPOXY PRIME (Part A)**
Product Code: EPO
CAS Name and Number: Not available (mixture)
Product Description: Formulated epoxy resin with M.I.B.K. (methyl iso-butyl ketone)

2. Hazardous Identification:

SAPMA Health Hazard Rating: 2 Moderate – Minor residual effects could result from accidental exposure if no treatment is applied.

Main Hazard: Pollutant, flammable

Flammability: Extremely flammable liquid and vapour.

Chemical Hazard: Bisphenol A-Epichlorhydrin, Aliphatic Glycidylether and M.I.B.K. Keep away from sources of ignition.

Health Effect: -Eyes: Hazardous. Can cause inflammation, burning / irritation,

- Skin: itching, redness and pain if splashed in eyes. Hazardous Irritant. Skin inflammation is characterised by itching, scaling, reddening or occasional blistering and sensitisation.
- Ingestion: Harmful. May cause nausea and diarrhoea and damage to the mucous membrane, sore throat, abdominal pains and laboured breathing.
- Inhalation: Adverse health effects from vapours or spray mist in poorly ventilated areas may induce irritation of the nose, throat and respiratory tract. Irritation may cause sore throat, coughing, headaches, dizziness, nausea and loss of consciousness.



3. Composition:

Chemical Preparation of modified epoxy resin and Methyl iso-butyl ketone.

Hazard Components:	CAS #	Symbols	Risk phrases	Safety phrases	% by WT
Bisphenol A-Epichlorhydrin	25068-38-6	Xi,N	R36/38,R43,R51,R53	S24/25/26,S28A,S37/39,S61	< 25
Bisphenol F-Epichlorhydrin	9003-36-5	Xi,N	R36/38,R43,R51,R53	S24/25/26,S28A,S37/39,S61	> 50
MIBK	108-10-1	Xi,N	R11,R20,R36/37,R66	S9,S16,S29	> 10 %
1,6 Hexanediol diglycidyl ether	16096-31-4	Xi	R36/38-43,R51/53	S24/25,S37/39,S61	< 25

4. First Aid Measures

- Product:
- Eyes: Check for and remove contact lenses. IMMEDIATELY flush open eyes with water for 15 minutes. Call a physician if necessary.
 - Inhalation: Remove to fresh air and if needed give artificial respiration of oxygen. In severe cases seek medical attention.
 - On skin: Use hand cleaner. Wash skin with soap and water. Remove contaminated clothing. Call a physician if irritation persists.
 - Ingestion: Do not induce vomiting. Give plenty water to drink in small sips. If necessary seek medical attention.
- Notes to a physician: Support respiratory and cardiovascular function.



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Fire Fighting Measure

- Extinguishing Media:** Carbon Dioxide, dry powders, (BC-powder) foam. Can use alcohol foam, water sprays or fog on large fires. Cool containing vessels with water jets in order to prevent pressure build-up, auto ignition or explosion.
- Specific Hazards:** In case of a fire aside from the major combustion products, Carbon Dioxide and Carbon Monoxide and other harmful gasses and vapour may be formed. Vapours may travel to sources of ignition and flash back. Most vapours are heavier than air. Vapours may form explosive mixtures with air. Containers may explode if heated. Vapour explosive hazard indoors, outdoors or in sewers.
- Protective clothing:** Use full numerical fire fighting equipment and self-contained breathing apparatus.

Accidental Release Measures

- Personal precautions:** Eliminate sources of ignition. Wear suitable protective clothing, gloves and eye / face protection. Ensure adequate ventilation or use respiratory protection. Prevent skin and eye contact.
- Environmental precautions:** Prevent from getting into drains, sewers or waterways and surface or soil.
- Small spills:** Mop up with sand, earth or approved absorbent inert materials and transfer to suitable container. Scrub contaminated surfaces with detergent solution and retain washings as contaminated waste.
- Large spills:** Eliminate all ignition sources. Contain spill by dicing edges with sand, earth or suitable absorbent inert materials (vermiculite). Transfer liquid to suitable container, using spark proof equipment. Keep all spills out of surge lakes, aquifers and any other running water supply. Dispose of in agreement with local regulations. Wear full protective suit and equipment when cleaning large spills.

Handling and storage:

- Handling precautions:** Ensure storage vessels and transfer equipment are earthed. Naked flames and other sources of ignition must not be present. Handle in well ventilated areas. Avoid contact with

aluminium containers. Plastics and rubbers are not recommended.

8. Exposure controls / Personal protection:

SAPMA Rating

2-H-G Hands, eyes, foot, apron, respirator

Engineering control measures: No open flames, no smoking, no sparks. Ensure adequate ventilation to ensure airborne concentrations of vapour are kept below their TLV. Ensure that eyewash stations are proximal to the work station.

Personal protection:

- Respirator: Use in enclosed areas when spraying and must be approved for organic vapours. Normal working conditions should have adequate ventilation.
- Hands: Use barrier cream and wear gauntlet type nitrile rubber or butyl rubber gloves. PVC gloves are suitable for short term contact.
- Eyes: Use face shield or goggles / safety glasses with side protection.
- Skin / Body: Use overalls and rubber or plastic apron. Wear suitable arm protection if body contact is possible. Wear closed chemical resistant footwear. Remove contaminated clothing to avoid skin contact.

Other protection:

Apply skin protection cream before handling. Wash hands before eating, drinking or smoking.

Exposure limits:

MIBK ACGIH: TWA – 50ppm
TWA – 205mg/m³
ACGIH TLV: STEL – 75ppm
OSHA: TWA – 50ppm
TWA – 205mg/m³
STEL – 75ppm



9. Physical and chemical properties:

Appearance: Amber coloured liquid.
Odour: Characteristic M.I.B.K. odour.
Solubility in water: Insoluble
Solubility in solvent: Soluble in M.I.B.K. Meths and Thinners
Density: 0.950 to 1050 g / l
Flammability: Flammable
Boiling point: 114 – 117°C

Melting point: Not determined
Flash point: Not determined

Oxidising properties: Non-oxidising
Vapour pressure: 15.7mm of Hg @ 20°C
Decomposition temp: Not determined
Auto ignition temp: 298°C
Viscosity: Not determined (low).

10. Stability and reactivity:

Stability: Stable at ambient temperatures.
Conditions to avoid: Exposure to high temperature or open flames and sparks. Caustic soda can induce vigorous polymerisation at temperatures around 200°C.
Materials to avoid: Strong oxidising agents, reducing agents, potassium tert-butoxide, amines, mercaptans and Lewis acids. Polymerises in contact with caustic soda. Reacts exothermically with bases (e.g. caustic soda), ammonia, primary and secondary amines, alcohols and acids.
Hazardous decomposition of by-products: Not expected to form during normal storage. Burning will produce dense, acid smoke containing Carbon Dioxide, Carbon Monoxide and other noxious fumes.
Hazardous polymerisation: Exothermic polymerisation.

11. Toxicological information:

Acute toxicity:

CAS nr	Substance	LD50(O)mg/kg	LD50(D)mg/kg	LC50ml/m3
25068-38-6	Epoxy resin > 700	> 2000	> 2000	
108-10-1	M.I.B.K.	2080	16000	2000

Local effects:

- Eyes: Burning / irritation, if splashed in eyes.
- Skin: Frequent or prolonged contact may irritate and cause dermatitis. May be absorbed with possible systemic effects. Skin sensitiser.
- Ingestion: Small amounts of liquid aspirated into the respiratory system during ingestion or vomiting may cause bronchi pneumonia or pulmonary oedema.
- Inhalation: High vapour irritates the eyes and the respiratory tract, causing headaches, dizziness, nausea, vertigo and unconsciousness and may have other nervous effects.

Chronic toxicity: Human: Passes through the placental barrier. Can cause CNS depression. Can cause gastro-intestinal disturbance. Exposure can cause

dermatitis. Exposure can cause stomach pains and vomiting. Prolonged chronic exposure may cause kidney damage.

Carcinogenicity: No evidence of carcinogenic effect.
Mutagenicity: Not determined
Neuro-toxicity: Not determined
Reproductive hazards: None known.

12. Ecological information:

Mobility: Viscous liquid. Sinks in water. If product enters soil, one or more constituents will be mobile and may contaminate groundwater.

Biodegradability: Resin solids are slowly biodegradable. Solvent vaporises.

Bioaccumulation: Solvent can bio-accumulate but with short retention time. Resin has the potential to bio-accumulate.

Aquatic toxicity: M.I.B.K.: Eco-toxicity in water (LC50) 460mg/l/24hr (goldfish)
505mg/l/96 hr (fathead minnow).
BOD = 2.03g oxygen/g MIBK.
COD = 2016 g oxygen/g MIBK.

Epoxy: Acute Toxicity

- Fish: Expected to be toxic, $1 < LC/EC/IC\ 50 \leq 10\text{mg/l}$
- Invertebrates: Expected to be toxic, $1 < LC/EC/IC\ 50 \leq 10\text{mg/l}$
- Algae: Expected to be toxic, $1 < LC/EC/IC\ 50 \leq 10\text{mg/l}$

Sewage treatment: Expected to be practically non toxic,
 $LC/EC/IC\ 50 > 100\text{mg/l}$

13. Disposal consideration:

Waste disposal: Liquid surplus or waste should be appropriately labelled. Disposal must be in accordance with current national and local regulations. Appropriate disposal is by incineration. Solidified wastes must be land filled in an appropriate H:H or H:h landfill site, but authorisation from appropriate sources should be sought.

Packaging disposal: Drain thoroughly, rinse three times with suitable solvent. Empty drums should be sent for reconditioning or scrap by a recognised drum reconditioner, appropriately labelled in accordance with national and local regulations. Empty containers pose a fire hazard. Hazard labels should not be removed. Incinerate or treat as for disposal of waste.

14. Transport information:

U.N. No. 3082 & 1245
Substance Identity no: None
Classification: Flammable
Hazardous warning: Class: 9 and 3 mixture
Packaging Group: III and II
Hazardous symbols: Miscellaneous substance / Flammable
Proper shipping name: Environmentally hazardous substance, liquid, N.O.S. (contains epoxy resin and Methyl Isobutyl Ketone)



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15. Regulatory information:

Symbols:

Xi: Irritant
N: Dangerous for the environment
Xn: Harmful

Hazardous symbols:

Highly flammable, harmful

Risk phrases:

R11: Highly flammable
R20/21: Harmful by inhalation and contact with skin.
R22: Harmful if swallowed.
R36/37/38: Irritating to eyes, respiratory system and skin.
R43: May cause sensitisation by skin contact.
R51-52/53: Toxic and harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R66: Repeated exposure may cause skin dryness or cracking.

Safety phrases:

S2: Keep out of reach of children.
S9: Keep container in well-ventilated place.
S16: Keep away from sources of ignition – no smoking.
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28A: After contact with skin, wash immediately with plenty of soap and water.
S29: Do not empty into drains.
S37/39: Wear suitable gloves and eye / face protection.
S61: Avoid release to the environment.

National / Local regulations:

Refer to Occupational Health and Safety Act (1993), Hazardous Chemical Substances Regulations and General Administrative Regulations.

EINECS:

203-550-1
All components listed or polymer exempt.



Other information:

Date of issue: June 2007

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Note:

The data and recommendations contained herein are based upon data that is considered to be accurate, however, Paintcor cc makes no warranty or guarantee, either expressed or implied, of the accuracy or completeness of this data and recommendations. Paintcor cc advises the user of the product to make their own determinations as to the information suitability and completeness for the particular application.

Abbreviations:

ACGIH:	American Conference of Governmental Industrial Hygienists.
OSHA:	Occupational Safety and Health Administration
NIOSH:	National Institute for Occupational Safety and Health
TLV:	Threshold limit value
PEL:	Permissible Exposure Limit
TWA:	Time Weighted Average
STEL:	Short Term Exposure Limit
PPE:	Personal Protective Equipment
LC50:	Lethal concentration, 50%
LD50:	Lethal dose, 50%
OEL:	Occupational exposure limit
DNEL:	Derived no-effect level
PNEC:	Predicted No-effect concentration.