

DEVCON 5-MINUTE EPOXY HARDENER

Material Safety Data Sheet

#02-016

Index stock no. 14250

ITW Devcon Corporation, 30 Endicott St., Danvers, Massachusetts 01923
Emergency telephone no.: (508) 777-1100; other calls: (508) 777-1100

Hazardous Materials Identification System ratings: Health: 2a
Flammability: 1
Reactivity: 1

Revised: December 14, 1989

Section 1. Product Identity

Tradename: 5-MINUTE EPOXY HARDENER

Chemical family: Polyepoxycapton/polyamine mixture

Other product information: This information applies to the hardener component of the two-part kit and to freshly mixed resin and hardener. After curing, 5-Minute Epoxy is not hazardous.

Section 2. Hazardous Ingredients

Ingredient	Weight %	CAS no.	Tv-TWA ^a	Notes
2,4,4-Tri(methoxyethyl)phenol (BMP)	10-30	90722	mg/m ³	

Severe eye irritant; possible sensitizer.

^a "TWA" means the Threshold Limit Value exposure 8-hour time-weighted average, unless otherwise noted) established by ACGIH.

"OSHA PEL" refers to the Permissible Exposure Limits for airborne contaminants as specified in 29 CFR 1990,1000.

2. "n/a" indicates that neither TWA nor OSHA Permissible Exposure Limit has been established.

NOTES: All—means carcinogen. R—suspect carcinogen. C—carcine limit (not a TWA). D—the TWA applies to dusts; this ingredient is not a dust or solid in our product. S—absorption through skin can be a significant route of exposure. TC* indicates a "Toxic Chemical" subject to the reporting requirements of SARA Section 313 (40 CFR Sec. 372).

Section 3. Physical Properties

Boiling point (F): n/d	Vapor density (air=1): n/d	Evaporation rate (butyl): n/d	Volatilility in water: Negligible
Melting point (F): n/d	Specific gravity: 0.97	Percent solids: 100	pH (S) by weight in water): 9.5
Vapor pressure (mmHg): (1 at 70 F			
Appearance and odor: Viscous, amber liquid with mild odor.			
Volatile Organic Compounds (VOC): 0 lbs/gal (EPA Reference Method 24)			Notes: "n/d" = "not determined".

Section 4. Fire and Explosion Hazard Data

Flash point: 300 F; method: PTFC	Explosive limits in air: lower—n/d; upper—n/d
Extinguishing media—water	CO ₂
Dry chemical	Foam
Alcohol foam	n/a
no	yes
yes	yes
	yes
	no

Special firefighting procedures: Firefighters should wear self-contained breathing apparatus and protective clothing in confined areas.

Unusual fire and explosion hazards: None

Section 5. Health Hazard Data

Emergency and first aid procedures—
EYES: Flush eye with clean water for at least 15 minutes while gently holding eyelids open. Get immediate medical attention.
SKIN: Remove contaminated clothing and shoes. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.
INHALATION: Remove patient to fresh air.
INGESTION: Do not induce vomiting. Consult a physician.

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Toxicity data—Oral LD₅₀ (rat): BMP: 1453 mg/kg; polyepoxycapton: >2500 mg/kg
Dermal LD₅₀ (rabbit): BMP: 1350 mg/kg; polyepoxycapton: >10200 mg/kg
Inhalation LC₅₀ (rat): BMP: >4.3 mg/liter; exposure time: hours

Symptoms of acute overexposure—

EYES: Animal tests indicate that the hardener can cause moderate to severe eye irritation.
SKIN: Animal tests on 5-Minute Epoxy Hardener have shown it to cause little or no skin irritation.
INHALATION: BMP vapor can cause irritation of the respiratory tract.
INGESTION: BMP is slightly toxic by ingestion; symptoms include fatigue, muscle weakness, labored breathing, and gastric irritation.

Effects of chronic overexposure: Prolonged or severe overexposure to BMP vapor can cause delayed lung damage and chemical pneumonia. Prolonged or repeated contact with 5-Minute Epoxy Hardener may cause skin irritation.

Medical conditions which exposure may aggravate: None reported.

Carcinogenicity—OSHA regulated? No ACGIH? No
National Toxicology Program? No International Agency for Research on Cancer? No
Impregnants listed: None

Section 6. Reactivity Data

Stability: Chemically stable
Conditions to avoid: Open flame and extreme heat.
Materials to avoid: Strong oxidizing agents.
Hazardous decomposition products: Oxides of carbon, oxides of sulfur, oxides of nitrogen.
Hazardous polymerization: Will not occur.

Conditions to avoid: When this hardener is mixed with an epoxy resin heat is generated; be careful when mixing more than 10 oz. or so.

Section 7. Spill or Leak Procedures

Spill control: Absorb spill on inert material such as sand or vermiculite and transfer to an impermeable container.
Waste disposal: Remove to a waste disposal facility operating in compliance with state and local regulations.
Applicable CERCLA/RCA hazardous waste codes: None
Reportable quantity under CERCLA, in pounds: n/a

Section 8. Protective Equipment

EYES—Safety glasses with side shields.
SKIN—Chemical-resistant rubber gloves.
RESPIRATION—None required in normal use with proper ventilation.
VENTILATION—Local exhaust is recommended for confined areas. General mechanical ventilation is adequate for normal use.

Section 9. Precautions for storage, handling, etc.
—Store well closed in a cool, dry place.
—Keep hands away from eyes when handling this hardener, or before washing after use.
—Wash thoroughly after using, particularly before eating or smoking.
Proper shipping name: Not regulated
DOT hazard class: None

Devcon Corporation bases the information and recommendations in this document on data believed to be correct. No warranty of any kind, however, is made as to the information in this document.

Record status: 1 devcon.ms

DEVCON 5-MINUTE EPOXY RESIN

Material Safety Data Sheet

5A462

Index stock no. 14250

ITW Devcon Corporation, 30 Endicott St., Danvers, Massachusetts 01923
Emergency telephone no.: (508) 777-1100; other calls: (508) 777-1100

Hazardous Materials Identification System ratings: Health: 1a
Flammability: 1
Reactivity: 1

Revised: December 14, 1989

Section 1. Product Identity

Tradename: 5-MINUTE EPOXY RESIN
Chemical family: Epoxy resin
Other product information: This information applies to the resin component of the two-part kit; handle freshly-mixed resin and hardener as recommended for the hardener. After curing, the product is not hazardous.

Section 2. Hazardous Ingredients

Ingredient	Weight %	CAS no.	Tv-TWA ^a	Notes
Bisphenol A diglycidyl ether resin	50	25064-36-0	mg/m ³	Potential skin sensitizer

^a "TWA" means the Threshold Limit Value exposure 8-hour time-weighted average, unless otherwise noted) established by ACGIH.

"OSHA PEL" refers to the Permissible Exposure Limits for airborne contaminants as specified in 29 CFR 1990,1000.

2. "n/a" indicates that neither TWA nor OSHA Permissible Exposure Limit has been established.

NOTES: All—means carcinogen. R—suspect carcinogen. C—carcine limit (not a TWA). D—the TWA applies to dusts; this ingredient is not a dust or solid in our product. S—absorption through skin can be a significant route of exposure. TC* indicates a "Toxic Chemical" subject to the reporting requirements of SARA Section 313 (40 CFR Sec. 372).

Section 3. Physical Properties

Boiling point (F): n/d	Vapor density (air=1): 1	Evaporation rate (butyl): <1
Melting point (F): n/d	Specific gravity: 1.2	Solubility in water: n/a
Vapor pressure (mmHg): (1 at 70 F		Percent solids: 100
Appearance and odor: Thick, amber liquid with little odor.		pH (S) by weight in water): ?
Volatile Organic Compounds (VOC): 0 lbs/gal (EPA Reference Method 24)		Notes: "n/d" = "not determined".

Section 4. Fire and Explosion Hazard Data

Flash point: >400 F; method: PTFC	Explosive limits in air: lower—n/d; upper—n/d
Extincting media—water	CO ₂
Dry chemical	Foam
Alcohol foam	n/a
no	yes
yes	yes
	yes
	no

Special firefighting procedures: Firefighters should wear self-contained breathing apparatus and protective clothing.

Unusual fire and explosion hazards: None

Section 5. Health Hazard Data

Emergency and first aid procedures—
EYES: Flush eye with clean water for at least 15 minutes while gently holding eyelids open. Get immediate medical attention.
SKIN: Wash thoroughly with soap and warm water. Consult a physician if irritation develops.
INHALATION: Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if sweating persists.
INGESTION: Do not induce vomiting. Give two glasses of water to dilute (unless patient is unconscious). Get medical attention.

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Toxicity data—Oral LD₅₀ (rat): 11,400 mg/kg
Dermal LD₅₀ (rabbit): >20,000 mg/kg
Inhalation LC₅₀ (rat): No deaths in saturated air; exposure time: 8 hours

Symptoms of acute overexposure—

EYES: Acid irritation.

SKIN: Acid irritation.

INHALATION: No data. The low vapor vapor pressure of the resin makes inhalation unlikely in normal use.

INGESTION: Acute oral toxicity is low. May cause gastric distress.

Effects of chronic overexposure: Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure.

Medical conditions which exposure may aggravate: Allergies, eczema, or other skin disorders

Carcinogenicity—OSHA regulated? No ACGIH? No
National Toxicology Program? No International Agency for Research on Cancer? No
Ingredients listed: None

Section 6. Reactivity Data

Stability: Chemically stable
Conditions to avoid: Open flame and extreme heat.
Materials to avoid: Strong acids and strong oxidizing agents.
Hazardous decomposition products: Oxides of carbon, aldehydes and acids from incomplete combustion.
Hazardous polymerization: Will not occur.
Conditions to avoid: Heat is generated when this resin is mixed with amines or epoxy hardeners; be careful when mixing large amounts.

Section 7. Spill or Leak Procedures

Spill control: Prevent skin and eye contact. Large spills may be absorbed on inert material such as sand or vermiculite. Scrape spill into aqueous containers. Clean spill area with strong detergent and water; use solvents only with appropriate caution.
Waste disposal: Remove to a waste facility operating in compliance with state and local regulation.

Applicable CERCLA/RCA hazardous waste codes: None

Reportable quantity under CERCLA, in pounds: n/a

Section 8. Protective Equipment

EYES—Safety glasses with side shields.

SKIN—Impermeable gloves and other gear as required to prevent skin contact.

RESPIRATION—None required at normal handling temperatures.

VENTILATION—Local exhaust is recommended for confined areas. General mechanical ventilation is adequate for normal use.

Section 9. Precautions for storage, handling, etc.

Store in a cool, dry place.

Handle mixed resin and hardener in accordance with the potential hazard of the curing agent used.

Remove contaminated clothing and protective gear; clean thoroughly before using again. Discard contaminated leather articles.

Rash thoroughly after using, particularly before eating or smoking.

Proper shipping name: Not regulated

P.U.T. hazard class: None

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