



SAFETY DATA SHEET

TS140A5
EPOXY PRIMER ACTIVATOR

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

TS140A5
EPOXY PRIMER ACTIVATOR

RECOMMENDED USE

Industrial epoxy coating designed for steel used in heavy-duty maintenance, oil field and OEM applications. Can also be used as a tank lining depending on the content of the tank.

MANUFACTURER

TCI Coatings, Inc.
4501 Bradley St
Lubbock, TX 79415
U.S.A.
Telephone: 1-800-880-8244

EMERGENCY TELEPHONE NUMBER

1-800-424-9300 (Chemtrec)

2. HAZARDS IDENTIFICATION

This product is a mixture and has been classified based on the current information available for the individual ingredients, in accordance with OSHA regulation 29CFR1910.1200(d)(3).

HAZARD CLASSIFICATION

Skin Corrosion/Irritation - Category 2
Serious Eye Damage/Irritation - Category 2A
Carcinogenicity - Category 2
Flammable Liquid - Category 2

PICTOGRAM



SIGNAL WORD

DANGER!

HAZARD STATEMENT

Highly flammable liquid and vapor. Causes skin and serious eye irritation. Suspected of causing cancer.

PRECAUTIONARY STATEMENT

PREVENTION: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces, pilot lights and all other sources of ignition- No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof ventilating and lighting equipment. Use only non-sparking tools. Take pre-cautionary measures against static discharge. Wash hands thoroughly after handling. Wear protective gloves, clothing, face and eye protection.

RESPONSE: In case of fire: Use dry chemical or Carbon Dioxide (CO2) to extinguish. Do not use water. If exposed or concerned: Seek medical attention. If on skin (or hair): Take off immediately all contaminated clothing and wash it before reuse. Wash skin with plenty of soap and water. If skin irritation occurs: Get medical attention. If in

eyes: Rinse cautiously with water for several minutes. Remove contact lenses. Continue rinsing. If eye irritation persists, seek medical attention.

STORAGE: Store locked up in a well-ventilated place. Keep cool.

DISPOSAL: Dispose of contents in accordance with local, state and national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	% BY WEIGHT	CHEMICAL NAME
1330-20-7	31 - 40	MIXED XYLENES
108-10-1	21 - 30	METHYL ISOBUTYL KETONE
71-36-3	11 - 20	1-BUTANOL
90-72-2	1 - 10	2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL
112-24-3	< 1	TRIETHYLENETETRAMINE

4. FIRST AID MEASURES

NECESSARY MEASURES

INHALATION: Move to fresh air. If not breathing or breathing is difficult: Give artificial respiration or oxygen by trained personnel. Get medical attention immediately.

EYE CONTACT: Check for and remove any contact lenses. Immediately flush with large amounts of water for at least 15 minutes. In case of eye irritation: Get medical attention.

SKIN CONTACT: Wash affected areas with soap and water or a recognized skin cleaner. Do NOT use solvents or thinners. Remove contaminated clothing and shoes. In case of skin irritation: Get medical attention.

INGESTION: Get medical attention immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person.

POTENTIAL HEALTH EFFECTS AND SYMPTOMS

INHALATION: Not anticipated to be harmful if inhaled. For chronic exposure, refer to Section 11.

EYE CONTACT: Can cause serious eye irritation. This may be experienced as eye redness, itching, stinging, the sensation of a foreign object in the eye, blurred vision, and excessive tears.

SKIN CONTACT: May cause skin irritation such as redness, itchy skin, inflammation, stinging and burning sensation, bumps, and scaly skin.

INGESTION: Ingestion may cause gastrointestinal distress. Symptoms include vomiting, nausea, and diarrhea.

INDICATION OF MEDICAL ATTENTION AND SPECIAL TREATMENT

If irritation or any symptoms of overexposure occur during or after use of this product, contact a POISON CONTROL CENTER at 1-800-222-1222 or an EMERGENCY ROOM or PHYSICIAN immediately. Have Safety Data Sheet information available.

5. FIRE FIGHTING MEASURES

FLAMMABILITY OF PRODUCT

Flashpoint: 57°F

Lower Explosive Limit: 1.1%

Upper Explosive Limit: 11.2%

EMERGENCY RESPONSE GUIDEBOOK (ERG)

Use Guide 128.

EXTINGUISHING MEDIA

Use dry chemical, carbon dioxide (CO₂), or foam. (If product contains alcohol, use alcohol-resistant foam). Water may not be suitable as an extinguishing media, but helpful in keeping adjacent containers cool.

SPECIFIC HAZARDS

HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. Substance may be transported hot.

Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control or dilution water may cause pollution.

PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode. Structural firefighters' protective clothing will only provide limited protection.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

PROTECTIVE EQUIPMENT

Use only non-sparking equipment to handle spilled material and absorbent. Put on appropriate personal protective equipment (see Section 8).

EMERGENCY PROCEDURES

Call Chemtrec at 1-800-424-9300 for emergency response. Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

MATERIALS FOR CONTAINMENT AND CLEANING UP

Inert absorbent material, e.g. sand, earth, vermiculite or diatomaceous earth.

METHODS FOR CONTAINMENT AND CLEANING UP

Approach release from upwind. Stop leak if you can do so without risk. Contain spill or leak by creating a dike and cover with absorbent material. Shovel or sweep into an appropriate waste disposal container. Prevent entry into waterways, sewers, basements or confined areas.

7. HANDLING AND STORAGE

HANDLING

Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation, wear respiratory protection. Do not breathe fumes or vapors. Use appropriate clothes and personal protective equipment (see section 8). Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not take internally. Keep out of reach of children.

This product is flammable. Keep away from heat, sparks, open flames, or any other ignition source. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Ground/bond container and receiving equipment.

STORAGE

Store in accordance with local regulations. Store in original container protected from direct sunlight and moisture in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above 100°F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES

CHEMICAL NAME	EXPOSURE LIMITS
MIXED XYLENES	ACGIH & OSHA-TWA: 100 ppm; ACGIH & OSHA-STEL: 150 ppm
METHYL ISOBUTYL KETONE	ACGIH TWA: 50 ppm, STEL: 75 ppm; OSHA PEL: 100 ppm
1-BUTANOL	ACGIH TLV: 25 ppm; OSHA TWA: 100 ppm
2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL	NONE ESTABLISHED
TRIETHYLENETETRAMINE	NONE ESTABLISHED

ENGINEERING CONTROLS

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

INDIVIDUAL PROTECTION MEASURES

RESPIRATORY PROTECTION

If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator approved by NIOSH/MSHA. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

SKIN AND BODY PROTECTION

Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Protective gloves, apron, boots, head and face protection may be required to prevent contact. Gloves should be chemical-resistant and impervious and comply with an approved standard.

When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

EYE PROTECTION

To prevent eye contact, wear safety glasses, chemical goggles, and/or head and face protection, depending on the task being performed and the risks involved.

OTHER MEASURES

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, using toilet facilities, etc. Promptly remove soiled clothing and wash clothing thoroughly before reuse. Shower after work using plenty of soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	UPPER EXPLOSIVE LIMIT
Liquid.	11.2%
ODOR	LOWER EXPLOSIVE LIMIT
Amine like.	1.1%
ODOR THRESHOLD	VAPOR PRESSURE
Not determined.	Not determined.

PH	VAPOR DENSITY
Not applicable.	Heavier than air.
FREEZING POINT	RELATIVE DENSITY (g/cm³)
below 0°F	.89
INITIAL BOILING POINT	SOLUBILITY IN WATER
241°F	Insoluble.
FLASH POINT	PARTITION COEFFICIENT: N-OCTANOL/WATER
57°F	Not determined.
EVAPORATION RATE	AUTO-IGNITION TEMPERATURE
Slower than ether.	Not determined.
FLAMMABILITY (SOLID, GAS)	DECOMPOSITION TEMPERATURE
Not applicable	Not determined.
V.O.C.	VISCOSITY
5.18 lb/gl	No data available.

10. STABILITY AND REACTIVITY

REACTIVITY

No specific test data related to reactivity available for this product or its ingredients.

CHEMICAL STABILITY

This product is stable.

POSSIBILITY OF HAZARDOUS REACTIONS

Under normal conditions of storage and use, hazardous reactions will not occur.

CONDITIONS TO AVOID

Avoid all possible sources of ignition (spark, heat or flame). Isolate from any incompatible materials.

INCOMPATIBLE MATERIALS

Strong oxidizers such as permanganates, chromates and peroxides. Strong acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS

In case of fire, fumes may contain carbon oxides, metal oxides, nitrogen oxides, or other unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE

Inhalation, ingestion and skin absorption.

SYMPTOMS

See section 4.

MEASURES OF ACUTE TOXICITY

Toxicological testing has not been conducted for this product as a whole. Available toxicological data for individual ingredients is summarized below:

METHYL ISOBUTYL KETONE (108-10-1):

- LD50 Oral: 2,000 mg/kg (rat)
- LD50 Dermal: > 2,000 mg/kg (rat)
- LC50 Inhalation: 8.2-16.4 mg/l, 4h (rat)

TRIETHYLENETETRAMINE (112-24-3):

- LD50 Oral: 1,600 mg/kg (mouse)
- LD50 Dermal: 1,465 mg/kg (rabbit)
- LC50 Inhalation: no data

MIXED XYLENES (1330-20-7):

- LD50 Oral: 3,523 mg/kg (rat)
- LD50 Dermal: 1,700 mg/kg (rabbit)
- LC50 Inhalation: 6,700 ppm, 4h (rat)

1-BUTANOL (71-36-3):

- LD50 Oral: 2,500 mg/kg (rat)
- LD50 Dermal: 3,400 mg/kg (rabbit)

- LC50 Inhalation: > 8,000 ppm, 4h (rat)
- 2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL (90-72-2):
- LD50 Oral: 1.2 g/kg (rat)
 - LD50 Dermal: 1.2 g/kg (rat)
 - LC50 Inhalation: > 0.5 mg/l (rat)

CHRONIC TOXICITY

METHYL ISOBUTYL KETONE (108-10-1): Ketones - Chronic exposures to six-carbon, linear chain ketones (methyl-n-butyl ketone, 2,5-hexanedione) metabolized to gamma-diketones are implicated in axonal neuropathy with secondary myelin damage. This manifests with peripheral neuropathy symptoms with paresthesias and muscle weakness. (HSDB, 2008)

MIXED XYLENES (1330-20-7): Exposure to xylene may cause a defatting dermatitis, reversible eye damage, dyspnea, confusion, dizziness, apprehension, memory loss, headache, tremors, weakness, anorexia, nausea, tinnitus, irritability, thirst, liver function test abnormalities, renal impairment, and anemia. Xylene contaminated with benzene has been associated with blood dyscrasias. (HSDB, 2009)

Hydrocarbon Solvents - Long-term or repeated exposure of hydrocarbons may lead to hematologic, hepatotoxic, renal, neuropsychiatric, neurological and carcinogenic effects. Hydrocarbons can destroy lipid bilayers and this can lead to "defatting" dermatitis following prolonged skin exposure. Greases, coal pitch, and cutting oils can produce acne and folliculitis. (HSDB, 2004)

NOTE: Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL TO FATAL.

CARCINOGENICITY

IARC: Yes
NTP: No
OSHA: No

METHYL ISOBUTYL KETONE (108-10-1) is classified as a Group 2B cancer agent (possibly carcinogenic to humans) by IARC (Monograph No. 101).

MUTAGENICITY

No data available.

REPRODUCTIVE TOXICITY

No data available.

SENSITIZATION

TRIETHYLENETETRAMINE (112-24-3) is classified as a Group 1 skin sensitizer by ECHA according to GHS and CLP regulations.

12. ECOLOGICAL INFORMATION

Ecological testing or classification has not been conducted for this product as a whole. Available ecological data for individual ingredients is summarized below:

ECOTOXICITY

METHYL ISOBUTYL KETONE (108-10-1):

- Fathead minnow: LC50 - 509 mg/l (96h)
- Zebrafish: LC50 > 179 mg/l (96h)
- Daphnia magna: EC50 > 200 mg/l (48h)

TRIETHYLENETETRAMINE (112-24-3):

- Bluegill: LC50 - 1,740 mg/l (96h)
- Rainbow trout: LC50 - 100 mg/l (96h)
- Fathead minnow: LC50 - 45 mg/l (96h)
- Annelids: EC50 - 4,720 mg/l (96h)

MIXED XYLENES (1330-20-7):

- Crustaceans: LC50 - 8.5 ppm (48h)
- Rainbow fish: LC50 - 2.6 mg/l (96h, semi-static test)
- Fathead minnow: LC50 - 9.09 mg/l (96h)
- Daphnia magna: EC50 - 75.49 mg/l (24h)
- Algae: EC50 - 4.36 mg/l (73h, static test)

PERSISTENCE AND DEGRADABILITY

METHYL ISOBUTYL KETONE (108-10-1): Readily biodegradable.
TRIETHYLENETETRAMINE (112-24-3): Not biodegradable (0% in 28 days, 20% in 84 days).
MIXED XYLENES (1330-20-7): Readily biodegrades in soil and ground water (72%).
2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL (90-72-2): Low biodegradability.

BIOACCUMULATIVE POTENTIAL

METHYL ISOBUTYL KETONE (108-10-1): Does not bioaccumulate.
TRIETHYLENETETRAMINE (112-24-3): Low potential to bioaccumulate (log Pow = -1.4 to 2.9; BCF = 99).
MIXED XYLENES (1330-20-7): Bioconcentration potential is low (log Pow = 2.77-3.15).
1-BUTANOL (71-36-3): Does not bioaccumulate.
2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL (90-72-2): Low to medium potential to bioaccumulate.

MOBILITY IN ENVIRONMENTAL MEDIA (SOIL, WATER)

METHYL ISOBUTYL KETONE (108-10-1): Not expected to adsorb.
TRIETHYLENETETRAMINE (112-24-3): Is a mobile liquid in soil.
MIXED XYLENES (1330-20-7): Potential in soil is medium: Partition coefficient (Koc) - 443 (estimated).
1-BUTANOL (71-36-3): Moderately to highly mobile.
2,4,6-TRI(DIMETHYLAMINOMETHYL)PHENOL (90-72-2): Low to medium solubility.

13. DISPOSAL CONSIDERATIONS**DESCRIPTION OF WASTE RESIDUES**

Any surplus materials, by-products, or sludge. Empty containers or liners may retain some product residue.

HANDLING OF WASTE

Wash hands thoroughly with soap and water after use.
Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Vapor from product residues may create a highly flammable atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally.

METHODS OF DISPOSAL

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste mixtures should be tested to determine the applicable EPA hazardous waste number. Also, reference RCRA information in section 15 if listed. Some waste materials are amenable to recycling or reuse.
Dispose of in accordance with local, state and federal regulations. Incinerate in approved facility. Do not incinerate closed containers. Waste should not be disposed of via drains or the sewer.

14. TRANSPORT INFORMATION**DOT CLASSIFICATION**

UN1263, PAINT, 3, II

ENVIRONMENTAL HAZARDS

Marine Pollutant - No

TRANSPORT IN BULK

Not applicable.

SPECIAL PRECAUTIONS

If transported within user's premises:
Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
If transported outside of user's premises:
The shipping description provided here is for informational purposes only. The person offering the product for transport is responsible for complying with the applicable regulations. Review all packaging for suitability prior to shipment.

15. REGULATORY INFORMATION

U.S. REGULATIONS

HCS CLASSIFICATION

See section 2.

UNITED STATES INVENTORY (TSCA 8B)

All chemicals in this product are listed, or are exempt from listing, on the TSCA inventory.

SARA 304

This product does not contain a chemical which is listed in Section 304 at or above de minimis concentrations.

SARA 313 TOXIC CHEMICALS

METHYL ISOBUTYL KETONE (108-10-1)

MIXED XYLENES (1330-20-7)

1-BUTONAL (71-36-3)

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES

This product does not contain a chemical which is listed in Section 302 at or above de minimis concentrations.

CERCLA HAZARDOUS SUBSTANCES

METHYL ISOBUTYL KETONE (108-10-1): RQ 5,000 LB

MIXED XYLENES (1330-20-7): RQ 100 LB

1-BUTANOL (71-36-3): RQ 5,000 LB

RCRA HAZARDOUS WASTE

METHYL ISOBUTYL KETONE (108-10-1): U161

MIXED XYLENES (1330-20-7): U239

1-BUTANOL (71-36-3): U031

CAA Section 112(b) HAZARDOUS AIR POLLUTANTS

METHYL ISOBUTYL KETONE (108-10-1)

MIXED XYLENES (1330-20-7)

CAA Section 112(r) SUBSTANCES FOR ACCIDENTAL RELEASE PREVENTION

This product does not contain a chemical which is listed in Section 112(r).

PROPOSITION 65 (CALIFORNIA)

Warning: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm: METHYL ISOBUTYL KETONE (108-10-1).

16. OTHER INFORMATION

DATE OF REVISION

7/25/2023

PREPARED BY

Rebecca Granados

MANUFACTURER DISCLAIMER

The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of the preparer's knowledge. However, since the use of this information and the conditions of the use of the product are not under the control of the preparer, it is the user's obligation to determine conditions of safe use of the product.