

# T-BOND | Vertical Crack Repair and Filling(HRC78)

## MATERIAL SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name. T bond Vertical

## 1.2 Recommended use and restriction on use Epoxy arylate(Adhesive)

General use Do not use except to purpose

Restriction on Use

## 1.3 Details of the supplier of the safety data sheet

Ultra epoxy,Corp 1201 Ave H,Grand Prairie,TX 75050 214-753-4423

## 1.4 Emergency telephone number

214-753-4423

## **SECTION 2: Hazards identification**

#### 2.1 GHS classification

flammable liquids Category: 3

Acute toxic(Inhalation-vapour) Category: 5

Skin corrosive/irritant Category: 2

serious eye damage/eye irritation Category: 2

Germ cell mutagenicity Category : 2 Carcinogenicity Category : 2 Reproductive toxicity Category : 2

Specific Target Organ Toxicity-Single Exposure Category: 3(Respiratory tract irritation)

Specific Target Organ Toxicity-Repeated Exposure Category: 1

Aspiration hazard Category: 1

#### 2.2 Label elements

GHS label elements, including precautionary statements Hazard symbols

Signal words Hazard statements







#### Danger

H226 Flammable liquid and vapour

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation

H319 Causes serious eye irritation

H333 May be harmful if inhaled

H335 May cause respiratory irritation

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H341 Suspected of causing genetic defects

H351 Suspected of causing cancer

H361 Suspected of damaging fertility or the unborn child

H372 Causes damage to organs through prolonged or repeated exposure

Precautionary statements

Prevent

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash ... thoroughly after handling.

P270 Do no eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.

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

protection/...

Corresponding

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or if you feel unwell: Get medical advice/attention.

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

P314 Get medical advice/attention if you feel unwell.

P321 Specific treatment (see ... on this label).

P331 Do NOT induce vomiting.

P332+P313 If skin irritation occurs: Get medical advice/attention P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P378 In case of fire: Use ... for extinction.

Storage P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up

Disposal P501 Dispose of contents/container in accordance with local/regional/

national/international regulation.

Other Hazard Risk which are not included in the classification criteria

NFPA Styrene: Health=1, Fire=2, Reactivity=2

Silicon dioxide: Health=0, Fire=1, Reactivity=0

## SECTION 3: Composition/information on ingredients

Chemical name	Trade name and Synonyms	CAS No	Content (%)
Silicon dioxide	-	112945-52-5	1~10
Styrene	-	100-42-5	<b>30~</b> 40

## Material Safety Data Sheet



#### **SECTION 4: First aid measures**

General advice Move out of dangerous area. Show this safety data sheet to ther doctor in

attendance. Do not leave the victim unattended

A. Eye contact Remove contact lens and pour a gentle stream of warm water through the

> affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room or physician as further treatment may be

necessary

B. Skin contact Run a gentle stream of water over the affected area for 15 minutes.

A mild soap may be used if available.

If any symptoms persist, contact a poison control center,

emergency room or physician as further treatment may be necessary.

C. Inhalation Remove patient to fresh air and seek medical assistance

Keep patient warm and at rest. If breathing is irregular or stopped,

administer artificial respiration.

Give nothing by mouth. If unconscious place in recovery position.

D. Ingestion Do NOT induce vomiting. Keep patient warm and at rest and call a doctor

immediately

Move out of dangerous area.

E. Indication of immediate medical Show this safety data sheet to ther doctor in attendance.

attention and notes for physician

Do not leave the victim unattended.

## **SECTION 5: Firefighting measures**

A. Extinguish media

Suitable Foam (alcohol resistant), carbon dioxide, powders, sand

Do NOT allow run-off from fire fighting to enter drains or water course.

Water jet

B. Specific hazards arising from the

chemical

Unsuitable

Special HAZARDS DUE to the substance, its decomposition products or

gases produced by fire:

Fire will produce dense black smoke. Inhalation of dangerous decomposition

products may cause serious damage to health.

C. Fire-fighting equipment/

instruction

Store in a dry area. When transferring material into flammable solvents,

use proper grounding to avoid electrical sparks.

Product surface alterations caused by calcining or mixing with additives may

alter toxicological properties

#### SECTION 6: Accidental release measures

A. Personal precautions, protective equipment and emergency procedures Use personal protective clothing, Handle in accordance with good building materials hygiene and safety practice

B. Evironmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/ surface waters/groundwater.

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C. Methods and materials for containment and cleaning up

For small amounts: Sweep/shovel up. Dispose of absorbed materials in accordance with regulations

For large amounts: Sweep/shovel up. Dispose of absorbed material in accordance with regulations.

## SECTION 7: Handling and storage

A. Precautions for safe handling Read and understand all safety precautions before you Do not handle.

Dust, fumes, gas, mist or vapor Avoid inhalation of spray.

Wash hands thoroughly after handling.

When using this product, eat, drink or Do not breathe.

A well-ventilated area or outdoors Please treat.

Workplace Do not export out of the contaminated clothing.

Pressure or, cut, or welding, soldering, bonding, drilling, grinding or heat, uncovered, flames, sparks, static electricity or other sources of ignition Do not

expose to.

Product containers have been emptied of debris may remain after all MSDS /

label precautions Follow.

Handling / storage please use caution.

Open your carefully before opening the cap.

Long-term or continuous skin contact barricade.

Please note that to avoid substances and conditions

Please pay attention to high-temperature

B. Conditions for safe storage By maintaining the temperature Avoid direct sunlight.

Please save the seals.

Please keep the interval between instillation.

Because reactive substances (...lb) than from excessive Please note that when

you do not exceed  $\sim$ °F.

Keep away from food and drink.

Keep away from oxidizing agents, from strongly alkaline and strongly acid

materials.

# SECTION 8: Exposure controls/personal protection

A.Exposures limit value, biological limit value etc

O Slicon dioxide

- Domestic Provision TWA: 10mg/m3 silicon oxide (amorphous, other dust)

ACGIH Provision no data available
 Biological limit values no data available
 Other limit values no data available

Styrene

- Domestic Provision TWA: 20ppm STEL: 40ppm (acceptance standard)

- ACGIH Provision TWA 20 ppm mg/m³STEL 40 ppm mg/m³

Biological limit values no data availableOther limit values no data available

Ester Resin

Domestic Provision no data available
 ACGIH Provision no data available
 Biological limit values no data available
 Other limit values no data available

# Material Safety Data Sheet



Process isolation, local exhaust, or air to adjust to levels below the exposure B. Approriate engineering controls

guidelines go for the other engineering controls.

During operation of dust, fume or mist occurs, the air pollution please

ventilation to maintain exposures below occupational limits

Store or use this material, washing facilities and safety shower facility below

to install.

C. Individual protection measures

Respiratory protection

Under conditions of frequent use or heavy exposure, respiratory protection

may be needed

Respiratory protection is ranked in order from minimum to maximum.

Keep Consider warning properties before use. Respirator (direct type small, organic gas)

Any chemical cartridge respirator (full facepiece and an organic vapor

canister)

Any air-purifying respirator (full facepiece and an organic vapor canister) For Unknown Concentrations or Immediately Dangerous to Life or Health if: Any supplied-air respirator (compound airline mask), air respirator with

a full facepiece

Protection from non-hazardous liquid products or Wear safety glasses. Eve/face protection

Wash facilities and emergency workshop near three facilities

(shower type) Keep installed.

Wear appropriate chemical resistant gloves. Hand protection

Skin protection Wear appropriate chemical resistant clothing.

## **SECTION 9: Physical and chemical properties**

a)Appearance(physical state) Liquid

b) Odour Organic solvent odor c) Odour threshold no data available Ha (b no data available e) Meting point/freezing point no data available f) Initial boiling point and boiling range no data available

g) Flash point(closed cup,  $^{\circ}$ C)

h) Evaporation rate no data available i) Flammability (solid, gas) no data available j) Upper/lower flammability or explosive limits no data available k) Vapor pressure no data available I) Solubility no data available m) Vapor density no data available n) Relative density 1.02~1.22

o) Partition coefficient(n-octanol/water) no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity 60000-90000 s) Molecular mass no data available

## SECTION 10: Stability and reactivity

A. Stability & hazardous Stability: Stable under normal temperature conditions reaction potential

Hazardous reaction potential: Hazardous polymerization

does not occur

B. Condition to avoid Heat, flame and sparks

C. Incompatible materials Flammable material, strong oxidizing agent, acid, amine D. Hazardous decomposition Toxic gas, fume, carbon dioxide, smoke, oxidies of nitrogen.

products

# Material Safety Data Sheet



## **SECTION 11: Toxicological information**

#### Information on the likely routes of exposure

Breathing through the respiratory tract

Acute toxic(Inhalation-gas) [Not applicable], Acute toxic(Inhalation-vapour) [Category 5], Acute toxic(Inhalation-dust and mist) [Not applicable], Respiratory sensitization [Not applicable], Aspiration hazard [Category 1]

Integrated mouth intake

Acute toxic(Oral) [Not applicable]

Skin contact

Acute toxic(Dermal) [Not applicable], Skin corrosive/irritant [Category 2], Skin sensitization [Not applicable]

Eye contact

serious eye damage/eye irritation [Category 2]

#### **Health hazards information**

O Silicon dioxide

Acute toxic(Oral) - Acute toxic(Dermal)	no data available no data available
- Acute toxic(Inhalation-gas)	no data available
- Acute toxic(Inhalation-vapour)	no data available
<ul> <li>Acute toxic(Inhalation-dust and mist)</li> </ul>	no data available
- Skin corrosive/irritant	no data available
- serious eye damage/eye irritation	no data available
- Respiratory sensitization	no data available
- Skin sensitization	no data available
- Germ cell mutagenicity	no applicable
- Carcinogenicity	no data available
- Reproductive toxicity	no data available
- Specific Target Organ Toxicity-Single Exposure	no data available
- Specific Target Organ Toxicity-Repeated Exposure	no data available
- Aspiration hazard	no data available

#### Styrene

- Aspiration hazard

Acute toxic(Oral) no data available - Acute toxic(Dermal) no data available Acute toxic(Inhalation-gas) no data available - Acute toxic(Inhalation-vapour) Category 4 - Acute toxic(Inhalation-dust and mist) no data available - Skin corrosive/irritant Category 2 - serious eye damage/eye irritation Category 2 - Respiratory sensitization no data available - Skin sensitization no data available - Germ cell mutagenicity Category 2 - Carcinogenicity Category 2 - Reproductive toxicity Category 2 - Specific Target Organ Toxicity-Single Exposure Category 3(Respiratory tract irritation) - Specific Target Organ Toxicity-Repeated Exposure Category 1

Category 1

# Material Safety Data Sheet



Ester Resin

- Biodegradable

No data available - Acute toxic(Oral) No data available - Acute toxic(Dermal) No data available - Acute toxic(Inhalation-gas) No data available - Acute toxic(Inhalation-vapour) No data available - Acute toxic(Inhalation-dust and mist) No data available - Skin corrosive/irritant No data available - serious eye damage/eye irritation - Respiratory sensitization No data available - Skin sensitization No data available No data available - Germ cell mutagenicity No data available - Carcinogenicity No data available - Reproductive toxicity - Specific Target Organ Toxicity-Single Exposure No data available - Specific Target Organ Toxicity-Repeated Exposure No data available No data available - Aspiration hazard

# SECTION 12: Ecological information

a) Aquatic and terrestrial ecotoxicity	
<ul> <li>Silicon dioxide</li> <li>Environmental Toxicity(Acute)</li> <li>Environmental Toxicity(chronic)</li> <li>for fish: no data available, for crustacea: no description</li> </ul>	No data available No data available lata available, for algae : no data available
<ul> <li>Ester Resin</li> <li>Environmental Toxicity(Acute)</li> <li>Environmental Toxicity(chronic)</li> <li>for fish: no data available, for crustacea: no descriptions.</li> </ul>	No data available No data available lata available, for algae : no data available
<ul><li>b) Persistence and degradability</li><li>Silicon dioxide</li><li>Persistence</li><li>Degradability</li></ul>	No data available No data available
<ul><li>Styrene</li><li>Persistence</li><li>Degradability</li></ul>	No data available No data available
<ul><li>Ester Resin</li><li>Persistence</li><li>Degradability</li></ul>	No data available No data available
c) Bioaccumulative potential	
<ul><li>Silicon dioxide</li><li>Bioconcentration</li><li>Biodegradable</li></ul>	No data available No data available
<ul><li>Styrene</li><li>Bioconcentration</li><li>Biodegradable</li></ul>	No data available No data available
<ul><li>Ester Resin</li><li>Bioconcentration</li></ul>	No data available

No data available

# Material Safety Data Sheet



d) Mobility in soil

○ Silicon dioxide No data available - Mobility in soil

O Styrene No data available

- Mobility in soil

Ester ResinNo data available

- Mobility in soil

e) Other adverse effects

Silicon dioxide

- Other adverse effects No data available

Styrene

Other adverse effectsEster ResinNo data availableNo data available

- Other adverse effects

# SECTION 13: Disposal considerations

A. Disposal methods Recommendation: Emptied containers should be recycled as scrap or

reconditioned, as appropriate.

Containers which are not properly emptied must be treated as special waste.

B. Disposal Considerations

Observe national and local legal requirements.

## SECTION 14: Transport information

A. UN number 1263
B. UN Proper shipping name PAINT

C. Transport hazard class
D. Packing group
3

E. Environmental hazards Not available

In case of fire emergency F - E Emergency spill S - E

## **SECTION 15: Regulatory information**

Industrial Safety and Health Act Toxic Chemical Control Act

**Dangerous Material Safety Control Act** 

Wastes Management Act

Other requirements in domestic and

other countries

No data available No data available No data available No data available

No data available

#### **SECTION 16: Other information**

A. The source of data

The information contained herein is believed to be accurate.

It is provided independently of any sale of the product for

purpose of hazardcommunication.

It is not intended to constitute performance information

concerning the product.

No express warranty, or implied warranty ofmerchantability or fitness for a particular purpose is made with respect to the

product or the information contained herein.

- This Safety Data Sheet was compiled with data and information from the following sources: OSHA, NITE, ESIS, NLM, SIDS, IPCS