

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: TRA-BOND F120 Hardener Date Printed: 2/10/00

Revision Date: 3/18/96 Revision: A

45 Wiggins Avenue Bedford, MA 01730 781-275-6363 1-800-872-2661

TRA-CON, INC.

Emergency Telephone: 1-800-424-9300 (24 hours, CHEMTREC)

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u> <u>CAS Number</u> <u>%</u> TWA STEL Ceiling OSHA ACGIH ppm mg/m3 ppm mg/m3 ppm mg/m3

Propane, 1,2,3-trichloro-,polymer with 068611-50-7 75 - 95

1,1'-(methylenebis(oxy))bis(2-chloroethane) and sodium sulfide reduced

Phenol, 2,4,6-tris((dimethylamino)methyl)- 000090-72-2 up to 20

3. HAZARDS IDENTIFICATION

Effects of Overexposure Repeated contact or breathing of vapors may cause irritation; material is also a

strong sensitizer. Eye and skin contact may cause transient irritation.

4. FIRST AID MEASURES

Eyes Flush with water, get medical attention.

Skin Wash with soap and water; remove contaminated clothing.

Inhalation Remove to fresh air.

Ingestion No known antidote but give milk or water; do NOT induce vomitting if swallowed; get

medical attention.

5. FIREFIGHTING MEASURES

Flashpoint > 325°F

Flashpoint Method COC

Extinguishing Media Dry chemicals, chemical foam, carbon dioxide, water.

Special Firefighting Measures Avoid breathing smoke. Addition of water may reduce flame intensity.

Fire and Explosion Hazards

Toxic gases may be liberated; handle as combustible; store in a cool place.

Flammable Limits N/AV
LEL N/A
UEL N/A

6.ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures Prevent skin and eye contact. Soak up in absorbent material, or scrape up, and

transfer to disposal container. Wipe up remaining residue with solvents, observing

solvent flammability cautions, or use detergents.

7. HANDLING AND STORAGE

Special Sensitivity Store in cool place in closed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Local Exhaust Recommended

Mechanical Exhaust Recommended

Eye Protection Requirements Safety glasses or goggles
Glove Requirements Rubber or plastic disposable.

Other Protection As required to prevent all body contact; eye bath and/or safety shower.

Respirator Requirements Air supplied or organic canister, mask in confined areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor Clear, amber liquid, mercaptan odor.

Boiling Point (°F) > 350

Solubility in Water slight

Specific Gravity (H2O=1) 1.2

Evaporation Rate (BuAc=1) low

Vapor Pressure (mm Hg.) < 1

Vapor Density (air = 1) > 1

Percent Volatile < 0.2

10. STABILITY AND REACTIVITY

Stability Stable

Conditions to Avoid (Stability) Avoid contact with metals corroded by liquid amines; avoid high temperatures.

Incompatibility (Materials to Avoid) Strong acids and bases, strong oxidizing agents.

Hazardous Decomposition

Products

Carbon monoxide, carbon dioxide, aldehydes, phenol.

Hazardous Polymerization Will Not Occur

Conditions to Avoid (Reactivity) Chlorinated compounds; exotherms when used to cure epoxy resins.

11. TOXICOLOGICAL INFORMATION

Primary Entry Route(s) Skin, eyes, inhalation.

Oral, LD50 Ingestion LD50 (rats) 2.5 grams/kg; Dermal LD50 10.2 grams/kg.

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of as hazardous waste according to local, state and federal regulations.

 $\label{thm:constraint} \mbox{Disposal method can be land burial or chemical incineration as regulated by all}$

governmental agencies.

14. TRANSPORTATION INFORMATION

Not Applicable

15. REGULATORY INFORMATION

TSCA: All components are on the TSCA inventory.

STATE LAWS:

The information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our research and on data from other reliable soruces and are believed to be accurate. no guaranty of accuracy is made. it is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.

16. OTHER INFORMATION

MSDS Date: 3/18/96 Revision: A HMIS Coding: H: 3 F: 1 R: 1



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: TRA-BOND F120 Resin Date Printed: 2/10/00

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ppm mg/m3

45 Wiggins Avenue Bedford, MA 01730 781-275-6363 1-800-872-2661

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2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u> CAS Number % TWA STEL Ceiling OSHA

henol.4.4'-(1-methylethylidene)bis-. 025068-38-6 80 - 100

Phenol,4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl) oxirane

3. HAZARDS IDENTIFICATION

Effects of Overexposure Repeated contact or breathing of vapors may cause irritation; material is also a

strong sensitizer. Eye and skin contact may cause transient irritation.

4. FIRST AID MEASURES

Eyes Flush with water, get medical attention.

Skin Wash with soap and water; remove contaminated clothing.

Inhalation Remove to fresh air.

Ingestion No known antidote but give milk or water; induce vomitting if large amount

swallowed.

5. FIREFIGHTING MEASURES

Flashpoint > 200°F

Flashpoint Method COC

Extinguishing Media Dry chemicals, chemical foam, carbon dioxide, water.

Special Firefighting Measures Avoid breathing smoke. Addition of water may reduce flame intensity.

Fire and Explosion Hazards Toxic gases may be liberated; handle as combustible; store in a cool place.

Flammable Limits N/AV
LEL N/A

UEL N/A

6.ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures Prevent skin and eye contact. Soak up in absorbent material or scrape up and

transfer to disposal container. Wipe up remaining residue with solvents observing

solvent flammability cautions, or use detergents.

7. HANDLING AND STORAGE

Special Sensitivity Store in cool place in closed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Local Exhaust Recommended

Mechanical Exhaust Recommended

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Eye Protection Requirements Safety glasses or goggles
Glove Requirements Rubber or plastic disposable

Other Protection As required to prevent all body contact; eye or bath and/or safety shower

Respirator Requirements Air supplied or organic canister, mask in confined areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor Light amber liquid, mild odor.

Boiling Point (°F) > 350

Solubility in Water low

Specific Gravity (H2O=1) 1.3

Evaporation Rate (BuAc=1) low

Vapor Pressure (mm Hg.) < 1

Vapor Density (air = 1) > 1

Percent Volatile < 0.2

10. STABILITY AND REACTIVITY

Stability Stable

Conditions to Avoid (Stability) Avoid uncontrolled excess heating over long periods; avoid uncontrolled amine reaction

Carbon monoxide, carbon dioxide, aldehydes, phenol.

Incompatibility (Materials to Avoid) Strong acids and bases, strong oxidizing agents.

Hazardous Decomposition

Products

Hazardous Polymerization Will Not Occur

Conditions to Avoid (Reactivity) High temperatures, strong acids; certain organics, metallic acids.

11. TOXICOLOGICAL INFORMATION

Primary Entry Route(s) Skin, eyes, inhalation.

Oral, LD50 LD50 (rats) > 4 grams/kg.

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of as hazardous waste according to local, state and federal regulations.

Disposal method can be land burial or chemical incineration as regulated by all

governmental agencies.

14. TRANSPORTATION INFORMATION

Not Applicable

15. REGULATORY INFORMATION

TSCA: All components are on the TSCA inventory.

STATE LAWS:

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