



**SAFETY DATA SHEET
EPCON C6+ HARDENER**

1. IDENTIFICATION

Product Name EPCON C6+ HARDENER
Product No. C4570partB
Identification No. 2735
Identified uses Two component epoxy based adhesive. Hardener.
Supplier ITW RED HEAD
700 High Grove Blvd.,
Glendale Heights,
IL 60139
Tel: 1-800-848-5611
www.itwredhead.com
Emergency Telephone Emergency Phone Number: 1-800-424-9300

2. HAZARD(S) IDENTIFICATION

Appearance Liquid
Color Dark brown. to Black.
Odor Characteristic.
Contains

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

WHMIS Label



Materials Causing Other
Toxic Effects.



Corrosive Material.

Controlled Product Classification

Canadian WHMIS Classification D2A D2B E

Human Health

Corrosive. Prolonged contact causes serious eye and tissue damage.

Inhalation

Vapor may irritate respiratory system or lungs.

Ingestion

May cause stomach pain or vomiting.

Skin Contact

May cause sensitization by skin contact. May cause serious chemical burns to the skin.

Eye Contact

Risk of serious damage to eyes. May cause chemical eye burns.

Health Warnings

May cause sensitization by skin contact. Causes severe burns.

Target Organs

No specific target organs noted

Medical Symptoms

Skin contact may cause: Chemical burns. Eye contact may cause: Chemical burns.

Medical Considerations

Splash in eye requires examination by eye specialist.

Other Health Effects

This substance has no evidence of carcinogenic properties.

Environment

Contains a substance which causes risk of hazardous effects to the environment.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

QUARTZ SAND	50-80%
CAS No.: 14808-60-7	EC No.: 238-878-4
GHS Classification Not classified.	
STYRENATED PHENOL	10-20%
CAS No.: 61788-44-1	EC No.: 262-975-0
GHS Classification Skin Irrit. 2 - H315; Eye Irrit. 2 - H319	
2-PIPERAZIN-1-YLETHYLAMINE	5-10%
CAS No.: 140-31-8	EC No.: 205-411-0
GHS Classification Acute Tox. 4 - H302; Acute Tox. 4 - H312; Skin Corr. 1B - H314; Skin Sens. 1 - H317; Aquatic Chronic 3 - H412	
1,3-CYCLOHEXANEBIS(METHYLAMINE)	5-10%
CAS No.: 2579-20-6	EC No.: 219-941-5
GHS Classification Acute Tox. 4 - H302; Acute Tox. 4 - H312; Skin Corr. 1A - H314; Aquatic Chronic 3 - H412	
SALICYLIC ACID	1-5%
CAS No.: 69-72-7	EC No.: 200-712-3
GHS Classification Acute Tox. 4 - H302; Eye Dam. 1 - H318	
SEPIOLITE CLAY	1-5%
CAS No.: 63800-37-3	EC No.: 264-465-3
GHS Classification Not classified.	

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation

Remove victim immediately from source of exposure. Get medical attention if any discomfort continues.

Ingestion

DO NOT induce vomiting. Get medical attention immediately.

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Skin Contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye Contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring these instructions.

Most important symptoms and effects, both acute and delayed

Inhalation

Irritation of nose, throat and airway.

Ingestion

May cause stomach pain or vomiting.

Skin Contact

Burning pain and severe corrosive skin damage. Blistering may occur. Chemical burns.

Eye Contact

May cause blurred vision and serious eye damage.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C)

Not determined.

Flammability Limit - Lower(%)

Not determined.

Flammability Limit - Upper(%)

Not determined.

Flash point (°C)

>=100°C CC (Closed cup).

Literature

Extinguishing Media

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

DO NOT use water if avoidable.

Hazardous combustion products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific Hazards

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective Equipment For Fire-Fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear protective clothing as described in Section 8 of this material safety data sheet.

Environmental Precautions

Collect and dispose of spillage as indicated in section 13. Contain spillages with sand, earth or any suitable adsorbent material. Avoid discharge into water courses or onto the ground.

Spill Clean Up Methods

Collect spillage in containers, seal securely and deliver for disposal according to local regulations. For waste disposal, see section 13.

Reference to other sections

For personal protection, see section 8. Collect and dispose of spillage as indicated in section 13.

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes.

Storage

Keep in original container.

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Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	STD	TWA (8-hrs)	STEL (15 min)	Notes
QUARTZ SAND	ACGIH	0.025 mg/m3		A2

COMPONENT	IDLH
QUARTZ SAND	25 mg/m3

ACGIH=American Conference of Governmental Industrial Hygienists.

A2: Suspected Human Carcinogen.

Protective Equipment



Process Conditions

Use engineering controls to reduce air contamination to permissible exposure level.

Engineering Measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory Equipment

Wear suitable respiratory protection.

Hand Protection

Wear protective gloves.

Eye Protection

Wear approved safety goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Color	Dark brown. to Black.
Odor	Characteristic.
Solubility	Not determined.
Initial boiling point and boiling range	Not determined.
Melting point (°C)	Not determined.
Relative density	1.8
Vapor density (air=1)	Not determined.
Vapor pressure	Not determined.
Evaporation rate	Not determined.
pH-Value, Conc. Solution	Not applicable.
Viscosity	>60s ISO2431
Solubility Value (G/100G H2O@20°C)	Not applicable.
Decomposition temperature (°C)	Not determined.
Odour Threshold, Lower	Not determined.
Odour Threshold, Upper	Not determined.
Flash point	>=100°C CC (Closed cup). Literature

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Auto Ignition Temperature (°C)

Not determined.

Flammability Limit - Lower(%)

Not determined.

Flammability Limit - Upper(%)

Not determined.

Partition Coefficient

(N-Octanol/Water)

Not determined.

Explosive properties

No information available.

Volatile Organic Compound (VOC) 354 g/litre

10. STABILITY AND REACTIVITY

Reactivity

Acids. Alkalis.

Stability

Stable under normal temperature conditions and recommended use.

Conditions To Avoid

Avoid contact with acids and alkalis.

Materials To Avoid

Epoxides.

Hazardous Decomposition Products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

11. TOXICOLOGICAL INFORMATION

Other Health Effects

This substance has no evidence of carcinogenic properties.

Toxicological Information on Ingredients:

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Acute toxicity:

Acute Toxicity (Oral LD50)

> 1470 mg/kg Rat

Acute Toxicity (Dermal LD50)

866 mg/kg Rabbit

STYRENATED PHENOL (CAS: 61788-44-1)

Acute toxicity:

Acute Toxicity (Oral LD50)

> 2000 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

SALICYLIC ACID (CAS: 69-72-7)

Acute toxicity:

Acute Toxicity (Oral LD50)

891 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

EPCON C6+ HARDENER
1,3-CYCLOHEXANEBIS(METHYLAMINE) (CAS: 2579-20-6)

Acute toxicity:

Acute Toxicity (Oral LD50)

700 mg/kg Rat

Acute Toxicity (Dermal LD50)

1700 mg/kg Rabbit

12. ECOLOGICAL INFORMATION

Degradability

There are no data on the degradability of this product.

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not determined.

Mobility:

Mobile. The product is partly soluble in water. May spread in the aquatic environment.

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

Ecological Information on Ingredients:

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Acute Toxicity - Fish

LC50 96 hours 2190 mg/l Pimephales promelas (Fat-head Minnow)

LC50 96 hours 368 mg/l Poecilia reticulata (Guppy)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 32 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 48 hours 494 mg/l Selenastrum capricornutum

STYRENATED PHENOL (CAS: 61788-44-1)

Acute Toxicity - Fish

LC50 96 hours 14.8 mg/l

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 1-10 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 72 hours 3.14 mg/l Scenedesmus subspicatus

SALICYLIC ACID (CAS: 69-72-7)

Acute Toxicity - Fish

LC50 48 hours 90 mg/l Leuciscus idus (Golden orfe)

Acute Toxicity - Microorganisms

EC50 3 hours > 3200 mg/l Activated Sludge

1,3-CYCLOHEXANEBIS(METHYLAMINE) (CAS: 2579-20-6)

Acute Toxicity - Fish

LC50 96 hours > 100 mg/l Leuciscus idus (Golden orfe)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 29 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 96 hours > 100 mg/l Scenedesmus subspicatus

Acute Toxicity - Terrestrial

EC50 14 days > 1000 mg/kg Eisenia Fetida (Earthworm)

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Contact specialist disposal companies.

14. TRANSPORT INFORMATION

UN No. (DOT/TDG) 2735

UN No. (IMDG) 2735

EPCON C6+ HARDENER

UN No. (ICAO)	2735
DOT Proper Shipping Name	AMINES, LIQUID, CORROSIVE, N.O.S., OR POLYAMINES, LIQUID, CORROSIVE, N.O.S.
TDG Proper Shipping Name	AMINES, LIQUID, CORROSIVE, N.O.S., OR POLYAMINES, LIQUID, CORROSIVE, N.O.S.
DOT Hazard Class	8
DOT Hazard Label	Corrosive
TDG Class	8
TDG Label(s)	8
IMDG Class	8
ICAO Class	8
Transport Labels	



DOT Pack Group	III
IMDG Pack Group	III
Air Pack Group	III
EMS	F-A, S-B

15. REGULATORY INFORMATION

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

None of the ingredients are listed.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed.

Massachusetts "Right To Know" List

The following ingredients are listed.

2-PIPERAZIN-1-YLETHYLAMINE

QUARTZ SAND

Rhode Island "Right To Know" List

The following ingredients are listed.

QUARTZ SAND

Minnesota "Right To Know" List

The following ingredients are listed.

QUARTZ SAND

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New Jersey "Right To Know" List

The following ingredients are listed.

2-PIPERAZIN-1-YLETHYLAMINE
QUARTZ SAND

Pennsylvania "Right To Know" List

The following ingredients are listed.

2-PIPERAZIN-1-YLETHYLAMINE
QUARTZ SAND

International Inventories

EU - EINECS/ELINCS

All ingredients are listed or exempt.

Canada – DSL/NDSL

All ingredients are listed or exempt.

US - TSCA

All ingredients are listed or exempt.

US – TSCA 12(b) Export Notification

None of the ingredients are listed.

Australia - AICS

The following ingredients are listed.

2-PIPERAZIN-1-YLETHYLAMINE
QUARTZ SAND
SALICYLIC ACID
SEPIOLITE CLAY
STYRENATED PHENOL

Japan – MITI

The following ingredients are listed.

1, 3-CYCLOHEXANEBIS(METHYLAMINE)
2-PIPERAZIN-1-YLETHYLAMINE
SALICYLIC ACID
STYRENATED PHENOL

Korea - KECI

All ingredients are listed or exempt.

China - IECSC

All ingredients are listed or exempt.

Phillippines – PICCS

All ingredients are listed or exempt.

16. OTHER INFORMATION

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date	08/23/2013
Revision	2
Supersedes Date	10/05/2013

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.