

What are epoxy resins?

Epoxy resins are chemicals which may be supplied as liquids, solids or solutions. When cured by mixing and reacting with a hardener, the liquid components are converted into a solid resin used as coating or bonding agents for many materials such as metals, concrete, plastics, rubber and wood.

Cured epoxy resin possess an outstanding combination of properties including mechanical strength, heat resistance as well as good impact, corrosion and chemical resistance.

Where are epoxy resins used?

Epoxies find a wide range of applications in many major industries, such as construction, electrical, automotive, aircraft and mining.

Safe handling

Epoxies are reactive chemicals which require correct handling to ensure that they are used safely. This means avoiding direct exposure of the body via skin contact, inhalation or ingestion. Ways of achieving this are outlined in the leaflet. In particular, skin contact should be avoided since this can lead to irritation and, in some cases, to skin sensitization.

These are general safety recommendations. Specific safety instructions provided by the resin supplier must be observed.

FIRST AID

Skin

If skin contact with epoxies occurs, wash the affected areas carefully with water. Avoid using solvents. Re-apply protective creams.

Eyes

In the case of eye contamination, wash the affected eye immediately and continuously for 15 minutes with clean water. Inform your supervisor immediately since medical advice may be necessary.

Inhalation

If an operator is affected by inhalation of vapour or spray mist, remove to fresh air immediately. Obtain medical advice.

FIRES

Chemical fires need to be extinguished with foam or carbon dioxide - not with water or carbon tetrachloride type extinguishers. Wear respiratory and eye protection while extinguishing fires involving epoxies.

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ELITE CHEMICAL INDUSTRIES
(PTY) LTD

COMMON SENSE ABOUT HANDLING EPOXY RESINS



Elite Cares

WORK SAFELY

Keep the work area clean and tidy

- Ensure that suitable ventilation is provided, especially in confined working areas. Local extraction may be necessary in areas containing fumes.
- A supply of skin cleaning preparations, paper towels and adequate washing facilities should be readily available.
- Use disposable containers and equipment where possible.
- Keep tools clean.
- Use waste bins with disposable liners.
- Do not eat, drink or smoke in the work area.



PERSONAL HYGIENE

Wash and clean carefully with soap and warm water

- After finishing work
- After any skin contact with epoxies
- Before smoking
- Before using the lavatory

Do not wash with solvents

- Use disposable towels
- Contaminated clothing should be dry-cleaned before Re-use



PROTECT YOURSELF

Use protective clothing and barrier creams

- Wear gloves
- Wear overalls and / or heavy duty apron
- Wear safety glasses

If exposure to fumes, spray mist or splashes is likely to occur - wear goggles and if necessary, a face shield and respirator.

Barrier creams provide useful additional protection but are no substitute for protective clothing.

