ELANTAS
Electrical Insulation

**Technical Information**
**Electronic and Engineering Materials & Secondary Insulation**

# TI-100
# Handling Precautions for Epoxy Resins

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# TI-100 HANDLING PRECAUTIONS FOR EPOXY RESINS

All epoxy resin and most curing agents are known sources of skin irritation. The epoxy formulas you are using contain the least irritating materials consistent with the cure properties the applications require. Most compounds are of the "minimum irritation potential" or "safety hardener" type and are relatively free of hazards.

However, in handling all epoxy systems, one simple rule should be followed: **AVOID SKIN CONTACT !** This includes avoiding exposure to and breathing of hot vapors.

By observing the procedures outlined below, you will benefit from the experience of many hundreds of epoxy resin users. By avoiding skin contact from the beginning of work, no difficulty need be encountered, and skin irritation will not become a problem.

1. Wear appropriate gloves as determined by your health and safety personnel when handling the uncured materials.

2. Work under conditions of good ventilation. Exhaust the fumes from curing epoxies into the outside air.

3. Launder work clothes frequently.

4. Change clothing contaminated with epoxy and launder before rewearing.

5. Keep working area clean. Any disposable cleaning items such as paper towels should be disposed of in accordance with your local regulations.

6. If wearing contaminated gloves, do not handle items touched by others, such as door knobs, light fixtures, etc.

7. When practical, employ automatic processing equipment – mechanical stirrers, plastic metering or dispensing machines, hand-gun applicators, etc. – to eliminate messy handling operations.

8. In case of skin contact, immediately flush skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash and thoroughly clean contaminated clothing and shoes before reuse. Consult a physician

**NOTE:** If the material is splashed in the eyes, irrigate with water for 15 minutes and get medical attention.

For the most part, these simple precautions are standard procedure for chemists and other personnel familiar with the handling of organic chemicals. They are rules that would normally be imposed in the interest of good housekeeping required for the handling of any sticky and potentially messy material, irrespective of its irritation potential.

Resistance to the sensitizing action of ingredients in epoxy formulations will vary from individual to individual, but with few exceptions, everyone possesses a satisfactory initial resistance. The resistance, however, is diminished with each contact, until it is eventually destroyed. Thereafter, the worker is sensitized and may develop a rash – or, more rarely, an asthma-like condition – after each new skin contact, and in hypersensitive individuals, after exposure to low concentrations of fumes which would otherwise have no discernible effect. The importance of preserving initial resistance is readily apparent.

If, through carelessness, the worker does become sensitized, a rash will appear on the hands, forearms, and perhaps the lower part of the face and eyelids. The rash will normally disappear within a few days without treatment, provided contact with the offending substance is avoided. If, however, skin contact is continued while the rash is present, medical attention may be required, and it may be necessary finally to remove the worker from all further contact with the epoxies. The physician should be informed that the rash is probably contact dermatitis from amines, anhydrides, or epoxy resins.

By avoiding skin contact from the very beginning of work with the epoxies, no difficulty need be encountered. If the rules given on the reverse side of this page are followed, dermatitis will not become a problem.

NOTE: Some epoxy formulations (i. e., the paints and varnishes) contain solvent blends and should be handled with special care to avoid breathing vapors and to prevent skin contact. If in doubt, please request individual MSDS from **ELANTAS PDG, Inc.**

The above properties are typical values and are not intended for specification use.