

# Epoxy resins under control with Sol-Vex™

*Occupational skin disease ranks as the most common occupational disease in many countries around the world with 'contact dermatitis' accounting for approximately 90-95% of all occupational skin diseases. Epoxy resins are known to be a major cause of occupational skin disease and put the user at a high risk of contact dermatitis.*



Most allergic contact dermatitis related to epoxy resin is localized to the hands and forearms. Contaminated hands can also spread the allergen to previously unexposed sites.

In a 2003 study of occupational dermatitis, epoxy resins were found to be the most important relevant allergen in painter groups, and the second most common relevant allergen in the construction industry. The three most commonly affected occupations were floor finishers, process workers and spray painters.

Within these applications, it was found that gloves were used by only 67.4% of workers. Furthermore, none of the gloves used gave the wearer adequate protection against epoxy resins.

The characteristics of epoxy resins include good chemical resistance, toughness and excellent adhesive qualities, which has led to their extensive use in adhesives, paints, coatings, sealants, fillers, concrete repair, reinforced polymer composites, varnishes, product finishing and laminates. They are widely used in the building and construction, printing, publishing and painting industries.

Occupational dermatitis causes widespread injury related costs, including lost time, falls in productivity, employee morale and profitability. A recent Australian study found that 60% of workers affected by dermatitis had applied for workers compensation and all of them had successful claims. In one study 6.7% of sufferers had at least 12 months off work.

Ansell Healthcare, the global leader in chemical handling protection, in conjunction with an independent German laboratory, recently conducted glove permeation tests for protection against epoxy

resins. The chemical resistance performance was measured on eight chemical gloves against five commonly used epoxy resins.

The results revealed that the Sol-Vex™ showed no signs of permeation after 8 hours contact with the epoxy resin, making it an excellent choice for this application. The Sol-Vex™ range is available in a range of options that include varying lengths, thicknesses, grip patterns, etc.



*The Ansell Sol-Vex™ Glove*

The disposable alternative, Touch N' Tuff™ did show some permeation after 45 minutes and is therefore recommended for splash protection only with regular changes.

Gloves made out of neoprene, natural rubber or vinyl, were not recommended for protection against epoxies.

*Source: Nugriaty D. I., Allergic Contact Dermatitis to Epoxy Resin: A Series of Occupational-Related Cases, The University of Melbourne Advanced Medical science May 2004, Occupational Dermatology Research and Education Centre.*

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