

# Personal safety when working with epoxy resins and isocyanates

## **Course objectives**

Participants can carry out work with epoxy and isocyanates in a health and safety manner, fully responsible for themselves and their surroundings.

With regard to special safety measures participants must:

- Ensure that the work with the epoxy and isocyanates complies with the guidelines from AT until the materials are cured and the risk of harmful effects has ceased
- be able to choose and use the right personal protective equipment, and possibly other safety measures using instructions, and potentially code number
- be able to put on, take off and use the personal protective equipment, including gloves, respiratory protection and workwear in a way, that ensures that skin, hands and surroundings won't be polluted with epoxy and isocyanate, and respiratory tracts are not exposed to aerosols, gasses and steams
- identify health risks when working
- have knowledge of AT's general prevention principle, including knowledge of the substitution principle and the use of this
- identify prohibited work situations, including the knowledge of the prohibition of spraying epoxy and isocyanates outside spray booths
- ensure that a warning sign is set up and if necessary other signaling when working with epoxy and isocyanates
- ensure that employees other than those working with the substances or materials do not stay so close to the work that they may be exposed to a health hazard
- have knowledge of hygienic and welfare measures, and how to use it correctly
- be able to provide first aid and emergency accident management in contact with epoxy and isocyanate, and also be able to use emergency shower and eye wash equipment

- have knowledge of proper waste management, including depositing used packaging, gloves and workwear making safety, health and environmental measures, so no one risks getting not fully cured epoxies or isocyanates on skin or hands.

The course must be conducted with equal parts of theory and practical tasks. The course of education must ensure that, regardless of the professional relationship, the participants should be able to relate to both small and large amounts of epoxy, resins and isocyanates.

In the theoretical part, particular attention should be paid to, among other things, instructions for use / safety data sheets, codes and health risks, so the participant is able to recognize the product's level of hazard, and make the right choice of personal protection equipment, and, if necessary, other precautions concerning the product.

The practical part includes exercises in handling personal protective equipment in a way, that ensures that neither the participant nor other people are contaminated. It also includes knowledge of workplace facilities as well as product knowledge / substitution product handling, accident and injury management,

The training contains the subjects necessary for participants to acquire the qualifications required in the AT's (Danish Working Environment Authority's) Executive Order No. 1793 of 18 December 2015 on working with substances and materials (chemical agents), appendix 3