Sanding of cured filler

The hazards presented by epoxy based sanding dust are much less than for the wet product.

Chemically, the base and curing agent should be largely reacted with each other.

However the dusts still contain some active materials and are potentially a health and safety hazard. Dust can easily coat the skin and you should therefore be protected against it.

As mentioned above for application and mixing, sanding of fillers is often a hands-on process. Sweating caused by the heavy work can lead to dust more easily sticking to skin and accumulating, especially in the fold of the elbow joint.

Fine dust particles of all sorts (eg. wood, GRP etc.), including fillers, are also potentially harmful if breathed into the lungs.

Recommended clothing / skin and eye protection when sanding epoxy fillers

- At the minimum, a half face respirator capable of filtering out particulate matter (like sanding dust).
- A long sleeve, long leg cotton overall (preferably a minimum of 60% cotton), in white for hotter climates, preferably with a hood.
- Long sleeve gloves.
- Safety boots that are anti-static with steel toe caps and should at least cover the ankles (to avoid drop hazards).
- The overall/glove and overall/boot overlaps can be sealed with tape to stop dust getting in.
- Safety goggles or glasses.
- Barrier cream should be worn to protect face skin, or else a full face mask or visor. Barrier cream should not be used in place of protective clothing such as gloves.

Summary

Epoxy based fillers are extremely useful products, offered by a large number of coatings companies.

When care is taken in their use these materials can be used safely with little risk to the applicator.

Further information about the use of Epoxy resin based coatings can be found at the following sites:

www.yachtpaint.com

www.awlgrip.com

The information enclosed in this booklet is relevant to all epoxy based products, which include; laminating resins, glues, primers, fillers, gelcoat repair resins

AKZO NOBEL

Your Health

A guide to using epoxy resin based fillers

Guidance provided by:

International yachtpaint.com

Interlux yachtpaint.com

AWLGRIP

Your Health

Protective equipment you may need for applicators, filler mixers and all others involved in the application of epoxy based materials

A guide to using epoxy resin based fillers

Introduction

Two-pack epoxy fillers are widely used for filling and fairing in the yacht industry.

They are extremely robust and versatile products, suitable for use above and below the waterline.

As with any chemicals, care should be taken whilst using these products. Always read the label before use. Up to date information and the relevant Safety Data Sheet can be found on our website.

This brochure outlines some basic precautions to take whilst applying any epoxy based filler product.

Epoxies and Amines: Health & Safety information

Epoxy fillers are usually supplied as two components, a base and a curing agent. The epoxy resin is usually in the base component, and the curing agent is usually based on an amine, which will react with the epoxy when the two components are mixed.

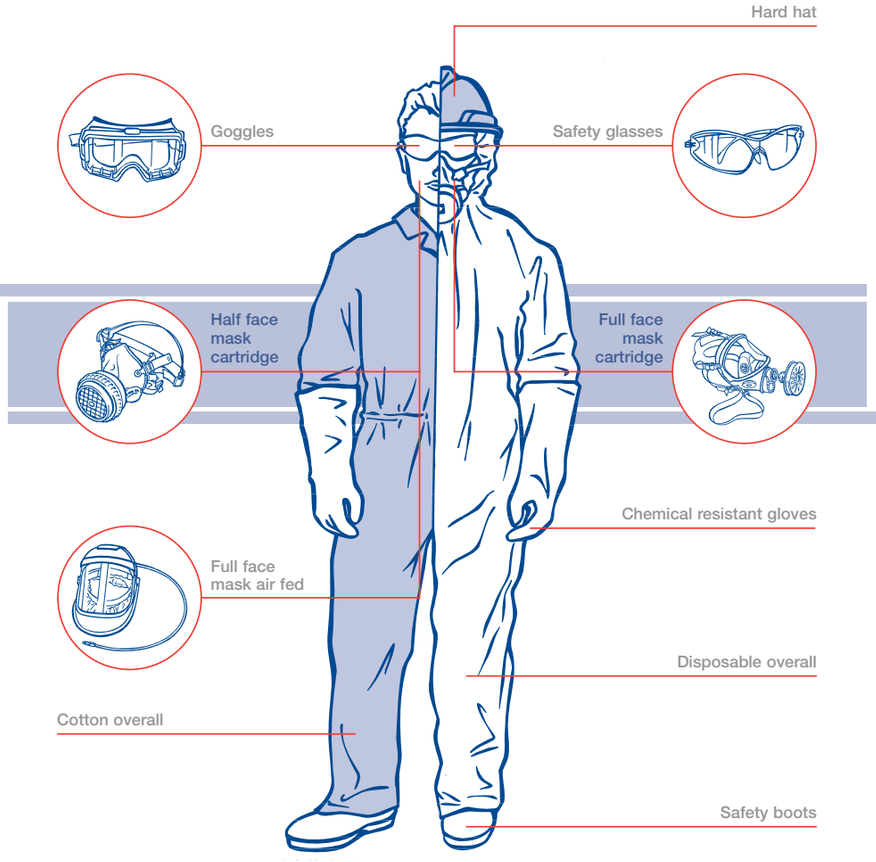
Epoxies do not easily pass through the skin so they are not normally toxic to people internally. However they are irritants and will cause red, itchy rashes. These can be treated with soothing cream and normally heal after about three days.

Amine and amide based curing agents have similar properties as epoxies. They can cause irritant rashes. Some are also corrosive; they could cause skin burns.

In certain circumstances, epoxies and amines can also have a more dangerous effect. If they penetrate the skin into the bloodstream and cause the production of antibodies. If this happens, then the person concerned will react to the smallest presence of epoxies or amines in the workshop and could break out with a severe irritant rash.

A person sensitised to epoxies or amines should seek medical advice, but may be permanently restricted from working with these materials again. In such a case, the individual is likely to be unable to work in a building where they are used without having an adverse reaction. The best way to avoid any such sensitisation is through proper use of recommended Personal Protective Equipment.

Irritation from material is common in the workplace if protective equipment is not properly worn. In contrast, actual instances of true sensitisation are relatively rare.



Mixing and application of two-pack epoxies

Although fillers are generally a lot thicker than standard two-pack epoxy paints and do not splash as easily, care must still be taken to avoid direct contact with these materials.

It is not enough just to avoid splashing product onto bare skin or into eyes, contamination of overalls, or any clothing being worn, should be avoided due to the risk of the materials soaking into the garments and coming into contact with the skin.

The mixing and application of fillers is usually a very hands-on operation, and as such is physically demanding work. Due to the heavy work and the working conditions which may take place in hot weather and/or under tarpaulins or plastic sheeting, the skin can become saturated with sweat. This will allow much better contact with the filler and irritant rashes/sensitisation are more likely in these conditions. Take care in these situations to avoid contact with the fillers.

Recommended clothing / skin and eye protection when mixing two-pack epoxies

- A long sleeve, long leg cotton overall (preferably a minimum of 60% cotton), in white for hotter climates.
- Chemical resistant gloves with long sleeves which overlap the overalls.
- Safety boots that are anti-static with steel toe caps and should at least cover the ankles.
- Safety goggles or glasses.
- Barrier cream should be worn to protect face skin, or else a full face mask or visor. Barrier cream should not be used in place of protective clothing such as gloves.
- A half face respirator may also be worn to avoid the inhalation of unpleasant and potentially harmful vapours from some amine curing agents.

Guidance provided by:

International yachtpaint.com

Interlux yachtpaint.com

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