

TOOLBOX TALK NO.2

Protection of the Skin



The skin is the largest organ in the human body and comes under the most attack from chemicals and dusts in the industry. Protective clothing and other PPE provides one of the most practical ways of limiting contact between the skin and other substances. To be effective, all protective clothing must be the right size, fit for the purpose, maintained in good condition, cleaned regularly and stored carefully when not in use – further information can be found in the PPE toolbox talk.

Industrial dermatitis is caused by contact between the skin, usually the hands, and irritant substances therefore it is essential that a risk assessment identifies the properties of the hazardous substance so that the correct type of glove can be provided. Dermatitis, an inflammatory skin disease that is neither infectious nor contagious but it accounts for over half of all working days lost through industrial sickness. Dermatitis is an inflammatory skin condition that is neither infectious nor contagious.

There are **two general types of Dermatitis**:

Contact or irritant dermatitis – usually where the skin comes into contact with an irritant substance, usually a chemical but it can be mineral

Allergic or sensitive dermatitis - this can be a sudden allergic reaction to a specific substance. (known as sensitisation)

Effects of contact with some materials

- Mineral oils, including fuel oils and mould oils can lead to inflammatory skin conditions such as dermatitis, acne or even skin cancer. These may be caused by constant contact with oil or oily clothes and rags.
- Chemicals, including strong alkalis and certain acids, chromates, formaldehyde, are substances that can penetrate the skin causing ulcers and dermatitis.
- Cement and Lime can also cause chronic dermatitis. Wetted cement and lime become more alkaline, corrosive and therefore potentially very damaging to the skin
- Solvents and de-greasers, thinners and similar solvents affect the skin by dissolving the natural oils which renders it more vulnerable to attack by other substances and bacteria
- Tar pitch, bitumen products cause inflammation, blisters and acne.
- Radiation, light and heat radiation: temperature and humidity make the skin more susceptible to dermatitis and other skin problems
- Epoxy resin hardeners, certain woods, glass fibres may also irritate the skin and lead to dermatitis.

Precautions to Protect Your Skin

- Comply with your company's safe system of work.
- Avoid skin contact with hazardous substances
- Wear the correct PPE.
- Keep your skin clean by regularly washing. Use barrier creams where provided on site after washing.
- Get first aid for cuts and grazes and keep them covered up.
- Don't use abrasive or solvents to clean your hands.
- Don't let synthetic resins or glue harden on your skin.
- If you do experience contact with hazardous materials, keep checking the affected area for signs of change in the skin e.g. changes seen as rashes or warts, as these may need medical treatment and surveillance.
- If working outside, keep applying high factor sun cream to stop burning.
- Seek professional advice if needed.

- Question: What effect to solvents have on the skin?
- Question: What can happen if skin is exposed to cement / concrete?
- Question: What can you do to protect your skin?
- Question: What should you do if you notice a rash or warts?

38% of construction injuries in Europe are to the hands

PPE Requirements

Hazard	Recommended Type of PPE (glove)
Acids, concrete, brickwork, stain removers, solvents and alkalis	Neoprene, Nitrile, PVC or Rubber
Esters, ethers, ketones, aldehyde and petroleum based products	Medium and Heavyweight rubber, neoprene, nitrile or PVC
High and Low Temperatures	Nitrile, PVC or medium and heavyweight rubber
Abrasion, unloading bricks and blocks and general materials handling	Rubber, nitrile, PVC, neoprene or chrome-leather with reinforced palm
Bitumen and hot work	Asbestos substitute or Nomex

Other Hazards

Skin Burns – Many substances used in the construction industry have corrosive properties that can cause severe burns to the skin. Hot-work processes also have the potential to cause skin burns.

Abrasions and Cuts – Manually handling objects with rough surfaces and sharp corners can cause damage to the skin of the hands if appropriate gloves are not worn. Worn out gloves must be thrown away and replacements obtained.

Important points

- ✓ Many of the substances used or created during construction work have the potential to cause severe skin problems
- ✓ The fact that skin complaints are on the increase suggest that the threats to health are not being taken seriously.
- ✓ The COSHH Assessment and MSDS sheet together with the substance's container, should indicate the degree of risk and the preventative measures necessary, refer to RAMS.
- ✓ Skin conditions can be prevented by simple actions such as wearing the correct PPE & good personal hygiene
- ✓ Prompt medical advice should be sought if there could be an emerging health problem
- ✓ Periodic self-checks or hand checks, carried out by someone trained to recognise the symptoms are an effective initial health surveillance.

Don't lose touch, protect your hands

