

1:5 Health and safety precautions (part 1)

Fire and explosion

The majority of paints contain flammable organic solvents. As soon as a paint container is opened, solvent vapours are released.

The flash point is the lowest temperature at which a liquid gives off sufficient vapour to form a flammable mixture in contact with air.

If the flash point of the paint is lower or close to the ambient air temperature there is a very considerable risk of fire or explosion. It only needs a spark or flame to set it off. If the flash point exceeds the ambient air temperature there is still a risk of fire. Therefore no naked flames, cigarettes or matches should be allowed near the area where paint is being applied or stored. Precautions should also be taken to avoid sparks caused by metal to metal contact or from electrical appliances. If a fire involving paint does occur:

- Do not extinguish with water, as paint solvents float on water, and this helps to spread fire.
- Use a dry chemical, foam, or CO₂ extinguisher.
- Protect yourself from the fumes with breathing apparatus.

Skin and eye contact

If paint is spilt the following precautions should be taken:

- Ventilate the area to remove the fumes.
- Mop up all spilled paint with absorbent material, ensuring that all materials used to mop up the paint are disposed of in closed metal containers.

It is recommended that the following precautions should be taken to prevent paint coming into contact with the skin and eyes:

- Select sensible working clothes that cover as much of the body as possible.
- Always wear gloves and eye protection.
- Do not touch your mouth or eyes with your gloves.
- Read and observe precautionary notices on paint containers.
- Eyes are particularly sensitive, so if you are splashed in the eyes, by paint or thinners flood them immediately with fresh water for at least 10 minutes and SEEK MEDICAL ADVICE IMMEDIATELY.
- If paint should splash on your skin, remove it with soap and water or an industrial cleaner. NEVER USE SOLVENT.
- Remember to wash hands and rinse mouth after working with paint.
- Despite these precautions paint can still come into contact with the skin or eyes (e.g. spray mist, excessive splashing), so a non-greasy barrier cream is recommended for all exposed skin.

Remember the object is to avoid skin contact. If your clothes become soaked in paint, change them immediately and thoroughly wash the affected garments with soap and water.

Inhalation

The inhalation of solvent fumes, dust, paint vapours must be avoided. Please follow these precautions listed.

- Ensure that ventilation is available to remove solvent fumes.
- If spaces are difficult to ventilate efficiently wear an airfed hood/mask.
- Think about where the fumes are being vented. They could affect other people in adjacent spaces.

Remember solvent fumes are heavier than air, they push breathable air upwards. They can flow down drains or ventilation ducts.

- If dizziness, drunkenness or headaches are experienced this could indicate you are being affected by solvent fumes. Move into the fresh air and do not return until the ventilation has improved.
- If breathing fumes results in the collapse of a painter they should be carefully moved into fresh air and allowed to recover gradually. Forced exercise is inadvisable.

- Never enter a space where fumes have or could have accumulated with-out wearing breathing apparatus.
- The mist of paint particles created when spraying should not be inhaled.

To prevent the inhalation of spray mists:

- In well ventilated spaces a dust cartridge respirator can filter out these particles of paint effectively. (Replace the cartridge regularly).
- If ventilation is poor an airfed hood or mask is essential, if any doubt whatsoever exists wear an airfed hood/mask.
- Never filter spray mists through rags wrapped over the mouth, as the rags can get soaked and allow paint to come into direct contact with the mouth. The rags are also rather inefficient filters.
- When surface preparation involves removal of old coatings, minimise the spread of dust generated to protect workers and neighbourhood communities and dispose of coatings residues carefully.
- When sprayed ISOCYANATE containing products may be harmful by inhalation or through contact with skin and eyes.
- Wear suitable protective clothing, gloves, eye and face protection, suitable breathing protection such as an air supplied respirator, or hood when applying isocyanate containing products by spray.

Additional information is available from the Health Department on the safe handling and application procedures for isocyanate containing products.

Ingestion

Food and drink should not be consumed, stored or prepared in areas where paint is stored or being applied.

In the case of accidental paint ingestion, medical attention should be obtained at once.