5. Safety Precautions

INTRODUCTION

These notes concern health and safety requirements, industrial hygiene and potential hazards involved in handling paint and thinners. They are not intended to be exhaustive and do not cover all eventualities during the application and storage of paint.

International Paint places considerable emphasis on the importance of the safe use of paint, and has developed products to cope with potential hazards.

Solvent free and WB products are available which minimise the hazards of fire and explosion and reduce the interference with people’s work in the vicinity of the painting operation.

Material Safety Datasheets on all products are available on request.

FIRE AND EXPLOSION

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

The lower explosive limit (LEL) is defined as the percentage of solvent vapour in the air which is the point where an explosion will occur if the air and solvent mixture is ignited with a spark. If the LEL is never reached, no explosion can occur. Information on LELs can be found on Product Health & Safety Datasheets.

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

- If the flash point of the paint is lower than or close to the temperature of the air there is a very considerable risk of explosion and fire.
- If the flash point exceeds the air temperature then there is no risk of explosion but there is still a risk of fire.

As such, therefore, no naked flames, cigarettes, matches or other sources of ignition should be allowed near an area where paint is being applied or stored. Precautions should also be taken to avoid sparks from electrical appliances or caused by metal to metal contact. 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 smoke and vapours with breathing apparatus/supplied air.

SKIN AND EYE CONTACT

If paint is spilled the following precautions should be taken:

- Eliminate all potential ignition sources.
- Ventilate the area to remove the vapours.
- Wear appropriate Personal Protective Equipment (PPE).
- Do not walk into the spill.
• 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.
• Arrange for proper disposal of all waste materials.

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. See Material Safety Data Sheet for details on relevant PPE.
• 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 15 minutes and seek medical advice immediately.
• If paint should splash on your skin, remove it with soap and water. 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 objective is to avoid skin contact. If your clothes become soaked in paint, change them immediately and thoroughly wash the affected garments with suitable detergent and water.

INHALATION

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

• Ensure that ventilation is available to remove solvent vapours.
• Check Material Safety Data Sheet for appropriate respiratory protection.
• If spaces are difficult to ventilate efficiently wear an airfed hood / mask.
• Spaces may require monitoring for LEL and exposure levels.
• Think about where the vapours are being ventilated. They could affect other people in adjacent spaces.

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

• If dizziness, drunkenness or headaches are experienced this could indicate you are being affected by solvent vapours. Move into fresh air and do not return until the ventilation has improved.
• If breathing vapours results in the collapse of a painter medical attention should be sought immediately. Forced exercise is inadvisable.
• Never enter a space where vapours have or could have accumulated without breathing apparatus.
INHALATION OF SPRAY MISTS

- The mist of paint particles created when spraying should not be inhaled.
- In well ventilated spaces a dust cartridge respirator can filter out these particles of paint effectively. Cartridges can be product specific, careful selection is required. (Replace the cartridge regularly, following a regular schedule).
- 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. Rags are also rather inefficient filters.

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 ingestion, medical attention should be obtained at once.

**Safety can be assured by adopting a sensible working attitude and good housekeeping practice.**

MATERIAL SAFETY DATASHEETS

Prior to use, obtain and consult the Material Safety Data Sheet for products being used concerning health and safety information. Read and follow all precautionary notices on the Material Safety Data Sheet and container label. If you do not fully understand these warnings and instructions or if you can not strictly comply with them, do not use this product. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapour concentrations within safe limits and to protect against toxic or oxygen deficient hazards. Take precautions to avoid skin and eye contact (i.e. gloves, goggles, face, mask, barrier creams etc.) Actual safety measures are dependent on application methods and work environment.