Painting by brush/roller

Control approach 1
General ventilation

What this sheet covers
This sheet describes good practice for mixing and applying solvent-based paints by brush or roller. It covers the key points you need to follow to help reduce exposure to an acceptable level, as part of your COSHH assessment.

The sheet does not apply to water-based paint.

Hazards
- Exposure to solvent vapours may result in a number of health effects, e.g. the central nervous system, irritation of eye, skin and respiratory system.
- Reactive products (e.g. epoxy and isocyanate-containing paints) may cause asthma by breathing in paint mist. They can also cause dermatitis by skin contact.

Access
- Make a specific assessment if rope work or over-side work is required.
- Erect barriers and notices.
- Restrict access to trained staff.

Storage
- Provide a well-ventilated, flameproof store with spill containment and spill clean-up kits.
- Segregate incompatible materials.
- Minimise the amount of product stored.
- Keep lids on containers when not in use.
- Provide eyewash equipment close to the work site.
- Provide appropriate firefighting equipment.
- Segregate and label waste.

Equipment and procedures

Mixing and cleaning
- Designate a room for paint mixing. This may be the paint store.
- Wire in the room ventilation with lighting circuit to provide good standards of general ventilation.
✓ Discharge extracted air outside the building, away from walkways and air inlets.
✓ Always open cans and mix paints inside the room.
✓ Clean mixing equipment as soon as possible after use.
✓ Decontaminate brushes, rollers and wipes before disposal as hazardous waste.
✓ RPE should not be needed if the ventilation is working properly.

*Brush or roller application*
✓ Apply paint in areas with good general ventilation.
✓ Provide forced ventilation in painting areas where there is no through draught.
✓ Use disposable brushes/rollers.
✓ Painters should avoid creating paint mists and work upwind of freshly painted surfaces.
✓ RPE is not normally needed.

*Respiratory protective equipment (RPE) – see sheet OCM4*
✓ Where ventilation is poor, or in the case of small spillages, provide RPE.
✓ Where necessary, provide CE-marked RPE with an assigned protection factor of at least 10 for the air contaminants.
✓ Provide air-fed RPE with an assigned protection factor of at least 20, for cleaning up larger spills of hardener.

*Other protective equipment*
✓ Provide disposable coveralls. Discard these at the end of the shift.
✓ Provide chemical-resistant gloves, e.g. nitrile. Single-use gloves are preferred.
✓ Tell workers to discard single-use gloves every time they take them off.

**Caution:** ‘Barrier creams’ or ‘liquid gloves’ do not provide a full barrier and should not be used as an alternative to properly selected protective gloves.

*Maintenance, examination and testing*
✓ Keep equipment in effective and efficient working order – follow instructions in maintenance manuals.
✓ Keep records of all examinations and tests for at least five years.

*RPE*
✓ Examine and test RPE thoroughly at least monthly and infrequently used RPE at least three monthly. Replace worn parts.

*Records*
✓ Keep records of all examinations and tests for at least five years.

*Exposure monitoring*
✓ Monitoring is not normally necessary.

*Cleaning and housekeeping*
✓ Clean the area after the task, or as specified in safe working procedures.
Employee checklist

Are you sure about safe work procedures?
Is the extraction working?
Do you have a spill clean-up kit handy?
Look for signs of wear and damage to equipment.
If you find any problem, get it fixed. Don't just carry on working.
Co-operate with health surveillance.
Discard single-use gloves every time you take them off. Discard other gloves at the end of the shift.
Wash hands before eating, drinking or using the lavatory.

Waste
Decontaminate all epoxy and isocyanate residues, including empty hardener containers. The safety data sheet should give a decontaminant recipe.
Dispose of waste paint, thinner, brushes and rollers as 'hazardous waste'.

Personal decontamination and skin care
Provide warm water, mild skin cleansers, nailbrushes, and soft paper, fabric towels or hot air for drying. Avoid abrasive cleansers.
Instruct workers in how to clean their skin effectively.
Tell workers to wash hands before every break.
Provide pre-work skin creams, which will make it easier to wash dirt from the skin, and after-work creams to replace skin oils.

Health surveillance
Conduct health surveillance for asthma where products are classified with a 'respiratory sensitiser' hazard.
Conduct low-level health surveillance for dermatitis involving skin checks by suitably trained responsible person.

Training and supervision
Provide supervision – ensure that safe work procedures are followed.
Tell workers, including maintenance workers, what the hazards and risks are.
Explain the early signs of asthma and dermatitis.
Training includes toolbox talks on:
- following safe working procedures;
- how to check that extraction is working properly;
- how to clean up spills correctly; and
- what to do if something goes wrong.
Involve managers and supervisors in health and safety training.

Essential information
OCE0 Advice for managers
OCM1 Confined spaces
OCM2 Local exhaust ventilation (LEV)
OCM3 Personal protective equipment (PPE)
OCM7 Health surveillance

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This guidance was developed by representatives from the UK offshore oil and gas industry and trade unions, with HSE.