

	MRAT 069	Solvent-based liquid paints	Applicable to: Hammerite; Sanding Sealer; Brushing cellulose	See also: 065 068 070
Process(es) covered:		<p>Sanding Sealer is a popular wood finish that dries quickly to give a shiny and attractive surface. The main constituent of the recommended thinner is toluene.</p> <p>Hammerite paints (and other 'hammer finish' or 'wrinkle' paints), often used on metals, contain ground glass in resin with xylene as a major constituent of the solvent.</p> <p>Brushing cellulose also uses a solvent based on xylene.</p>		

Control Measures

- Wear eye protection and avoid contact with skin.
- Remove all naked flames and other sources of ignition before pouring toluene thinner or toluene-based finishes.
- Avoid using sanding sealer unless local exhaust ventilation is available or it is practicable to work in the open air.
- Provide good general ventilation when using *Hammerite* paints and brushing cellulose, on a small scale.
- If spraying water-based wood dyes, precautions should be taken to minimise breathing in the spray.

Immediate Remedial Measures:

Paints are swallowed	DO NOT INDUCE VOMITING. Keep casualty at rest. Call 111 and seek medical attention.
Vapour from paints is inhaled	Remove casualty to fresh air. Keep warm and at rest. If breathing is irregular or has stopped, administer artificial resuscitation. Call 111 and seek medical attention.
Paint is splashed into the eyes	Irrigate immediately with water for at least ten minutes, holding eyelids apart. If discomfort continues, call 111 and seek medical attention.
On the skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleanser. Do not use solvents.
Spilt in the workshop	Remove sources of ignition. Ventilate area. Contain and collect the spill with non-flammable absorbent material, eg, sand or earth. Store safely pending disposal. Do not allow to enter drains.

Storage	Normally in a steel cupboard specifically designed for the storage of highly flammable materials. Away from sources of ignition. In accordance with the requirements of the <i>Dangerous Substances and Explosive Atmospheres Regulations 2002</i> . Up to a total of 50 litres can be held in small containers in a fire-resisting 'highly-flammable liquids cupboard or bin'.
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Disposal	An authorised waste disposal contractor should be used. Waste materials must be treated as a fire hazard and disposed of in accordance with the <i>Hazardous Waste Regulations</i> .
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Risk Assessment

Hazards:

Harmful Irritant Highly flammable	<p>Toluene (methyl benzene) [LTEL (8 hrs) 191 mg m⁻³, STEL (15 mins) 384 mg m⁻³] is classified as Highly flammable liquid and vapour [H225]. May be fatal if swallowed and enters the airways [H304]. Causes skin irritation [H315]. May cause drowsiness or dizziness [H336]. Suspected of damaging the unborn child [H361d]. May cause damage to organs through prolonged or repeated exposure [H373]</p> <p>Xylene (dimethyl benzene) [LTEL (8 hrs) 220 mg m⁻³, STEL (15 mins) 441 mg m⁻³] is classified as Flammable liquid and vapour [H226]. Harmful in contact with skin [H312]. Causes skin irritation [H315]. Harmful if inhaled [H332].</p> <p>Sanding sealer and the thinners are highly flammable. (as are xylene and toluene)</p>
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Risks:

Harmful	<p>WEL values for toluene can easily be exceeded if sanding sealer is used extensively or if jars of thinner are used to hold brushes between use.</p> <p>The WEL values for xylene vapour could be exceeded if <i>Hammerite</i> paint is used extensively or if jars of thinner are used to hold brushes between use.</p>
Irritant	<p>Splashes to the eye will cause discomfort and possible damage. Prolonged contact with the skin may have a defatting effect that may lead to skin irritation and dermatitis.</p>
Highly flammable	<p>There is a serious risk of fire if any source of ignition is present close to where sanding sealer is being used or handled.</p>

Further Information:

- NB Benzene is very toxic and a category 1 carcinogen. It must **not** be used in schools and any old stocks, formerly used as a cleaning solvent, must be disposed of responsibly.
- Only specialist paints now contain lead but it is just possible that old stock, containing lead, is still liquid! Such stocks should be disposed of and certainly not used.
- Water-based wood dyes applied by rag, brush or dipping present minimal hazards.
- Some polishes may contain toluene, this should be avoided by women who are, or may be pregnant, so is best avoided with female staff and pupils.