

Know your hazard:

Liquid Industrial Paints

What are liquid industrial paints?

Liquid industrial paints are of two types, water-based and solvent-based. They are distinguished on the basis of amount of Volatile Organic Compounds (VOC) content present in them.

Water-based or emulsion paints



Lower VOC levels

Lower risk of exposure to respiratory hazards

Solvent-based or oil-based/alkyd paints



Higher VOC levels

Higher risk of exposure to respiratory hazards due to VOC like Xylene, Toluene, and Ethyl acetate

Sources of exposure to liquid industrial paints

Workers can be exposed to harmful effects of paints while:



Brushing or rolling



Application by spray



Using cleaning agents and reducing agents on paints

Harmful effects of using solvent-based or oil-based/alkyd paints

Exposure risk to solvent-based paints increases because of their composition that includes reducing agents and clean-up solvents. Certain solvent-based paints include isocyanates, a class of chemical compounds.

Exposure to isocyanates can cause:



Skin irritation



tightness



breathing



Adverse effect to respiratory tract





How can one protect against it?

In order to reduce exposure and risks to workers, you can:



Contact risk assessment to compare exposure levels with Malaysia OSHA Permissible **Exposure Limit (PEL).**

Implement engineering controls such as local exhaust ventilation (LEV).





Get Respiratory Protective Equipment (RPE).

What RPE does 3M recommend for protection against liquid industrial paint?

3M offers respiratory protection equipment designed for different types of paint, whether water-based or solvent-based,

and the specific airborne contaminants. Type of Recommended

Respirators

3M Respiratory Protective Equipment**



Powered Air Respirator

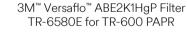


3M[™] Versaflo[™] Heavy Industry PAPR Kit, TR-600E-HIK











Reusable

Respirator







3M™ Versaflo™ Vortex Cooling

Assembly V-100



3M™ Secure Click™ Cartridge D8059, A1B1E1K1 (Use with Filter Retainer D701 and Pre-Filter D7925 if application is spray painting)



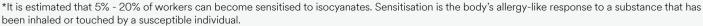


FF-800 or Half Facepiece HF-800 Series

3M™ Particulate Respirator 8577, P95, with Valve and Nuisance Level Organic Vapour Relief



3M™ Particulate Respirator 9542V, P2, with Valve and Nuisance Level Organic Vapour Relief



**This is only recommendation for minimum PPE required. Each work application must be evaluated by a competent person as required by local law and regulation for the hazard and risk before selection of right PPE. Workplace rules and regulations must take precedent, if more stringent.



REQUEST A DEMO To know which respiratory



READ MORE For more information on the

hazard and product disclaimers, scan the QR code for the technical bulletin.



EXPLORE MORE

To discover variety of respiratory protection equipment from 3M, for your workers, scan the QR code.