

# Isocyanates in Paint



## What else are they doing?

Industrial painters are exposed to many hazards due to the materials they work with.

One that poses a significant health risk is isocyanates, which are chemicals used in the production of polyurethane materials. These are present on many industrial sites and can be found in rigid/flexible foams, surface coatings, paints, electrical wire insulation, adhesives, rubbers, and fibers. Because industrial applications rely so heavily on these materials, it is almost impossible to avoid them.

Without the correct respiratory protection, exposure can cause the following five health issues:

Irritation of the skin, eyes, nose, and throat **1**

Cancer **2**

Occupational asthma **3**

Chemical Bronchitis **4**

Gastrointestinal irritation **5**

## How should we protect ourselves?

As for any hazard the first measures that should be taken are finding an alternative product to use, isolate the hazard from people, and use engineering/administrative controls to mitigate the risk. However, for tasks such as on-site mixing, spray painting, foaming, and maintenance of machine ventilation, it is not practical to minimize exposure. In these instances, it is required by OSHA\* that operators wear supplied air respirators. \*Required for OSHA standard 1910.134.

## How does supplied air protect you?

A supplied air respirator is a loose-fitting respirator which is attached to a breathing tube that is connected to a compressed air source. Air is drawn from an external source and filtered before being supplied to the operator's breathing zone. The headtop they are wearing protects their skin and eyes, and the clean filtered air protects their respiratory system from the isocyanates in the environment, making it safe to work with them. When workers cannot be placed in a safe environment, PPE should be utilized to mitigate hazards on the site to ensure operators get home safe each day.

Help us spread the word about respiratory protection.

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