Isocyanates

Insulation Sector

Isocyanates are chemicals used as hardening agents in the mixing of spray polyurethane foam (SPF). One of the most commonly used is methylene diphenyl diisocyanate, or MDI.

How can this chemical affect my health?

Acute (Short Term) Effects

- **Toxic to Humans & Animals** - Can be fatal on contact, ingestion or inhalation for humans and other mammals.
- **Irritates the Eyes** – Can cause irritation or serious damage to the eye.
- **Irritates the Skin** – Can cause irritation or serious damage to the skin.

Chronic (Long Term) Effects

- **Cancer** – Can cause or increase the risk of cancer.
- **Asthma Trigger** – Can result in high sensitivity so that small quantities trigger asthma, nose or sinus inflammation or other allergic reactions in the respiratory system.
- **Sensitizes the Skin** – Can lead to allergic reactions on the skin.
- **Other Health Effects** – Can cause serious damage on contact or ingestion.
- **Birth Defects** – Can cause harm to the developing child including birth defects, low birth weight and biological or behavioral problems that appear as the child grows.

What are safer alternatives?

- **GOOD** - Use in limited circumstances where SPF is the only viable option, such as uneven interior foundation walls.
- **BETTER** - Use non-chemical applications such as mortar, if possible, on smaller projects.
- **BEST** - Consider other forms of insulation, such as mineral wool, cellulose or fiberglass.

Effects detailed above can occur at various stages of the product’s lifetime, not just during usage. All have been included to provide a complete picture of the chemical’s danger.