



# In Touch

# **EHS Newsletter** August 2018



Isocyanates are the raw materials that make up all polyurethane products. They react with compounds containing alcohol groups to produce polyurethane polymers, which are components of polyurethane foams, thermoplastic elastomers, spandex fibres and polyurethane paints.

The health effects of isocyanate exposure include occupational asthma; skin irritation (dermatitis); irritation to the mucous membranes, eyes, nose and throat; gastrointestinal irritation; chemical bronchitis and pneumonitis. Although symptoms may improve after the irritant is removed, acute asthma attacks may occur after renewed exposure to isocyanates, even if the exposure is very small or very brief. Dermal sensitivity as a result of overexposure may result in rash, itching, hives and swelling of extremities. Because isocyanates are typically insoluble in water, they are not easily washed off of an affected worker's skin or clothing.



Preventing a worker's exposure to isocyanates is a critical step in eliminating the health hazards associated with isocyanates. Applying engineering controls (e.g. mechanical ventilation) and requiring personal protective equipment can help limit worker exposure. The use of chemical-resistant clothing and gloves is essential to protecting workers' skin from coming into contact with isocyanates.

# **DIFFERENT SERVICES** THAT INCLUDE:

WE PROVIDE A NUMBER

- **EHS Risk Assessments**
- Occupational **Hygiene Surveys**
- Ergonomics Surveys
- EHS Management
- System development and implementation
- Environmental Monitoring
- Identification of EHS **Legal Requirements** and Compliance **Audits**
- **Construction EHS** Services
- Construction H&S Files
- **Internal Auditor Training**
- **General EHS Training**





OH0049



DoL Approved Inspection Authority (OH0049-CI-09)

Newsletter compiled by Lee Rands

# **Technical Workshop Presented by Dr Brett Williams**

## **Local Exhaust Ventilation**

Design principles to ensure your supplier is properly informed when developing purchasing specifications

### **Discussion Points:**

- Dilution Ventilation vs Extraction vs General Ventilation
- ASHRAE Standard 110:2016 / ACGIH Manual of Design
- Do's and Don'ts of Hood Design & Ducting
- Practical exercise to determine fan size



21st August 9am - 3pm

St Georges Club, Central, Port Elizabeth

Lee Rands 041 3656846

# training

### **Public Course Calendar** Port Elizabeth



### **AUGUST**

22nd **Construction Regulations** 30th - 31st ISO 14001 & 45001 Internal Auditing (combined)

31<sup>st</sup> Introduction to Environmental Legislation

### **SEPTEMBER**

10<sup>th</sup> SHE Reps (Refresher) 11th Local Exhaust Ventilation Workshop

14<sup>th</sup> Fire Prevention

25th - 27th SHE Reps

28th Hazardous Chemical Substances Regulation

### **OCTOBER**

 $4^{th} - 5^{th}$ **Incident Investigation** 

 $16^{th} - 18^{th}$ Basic Principles in Occupational Hygiene

26<sup>th</sup> Introduction to the OHS Act

### **NOVEMBER**

5th - 6th HIRA

9<sup>th</sup> Hazardous Chemical Substances

20th - 21st Advanced OHS Act

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**Southern Office** 

Tel: +27 (0)41 365 6846

Fax: +27 (0)41 365 2123

**Northern Office** 

Tel: +27 (0)82 4111 571

Fax: +27 (0)86 6579 864

carlita.westoby@safetech.co.za

PO Box 27607

Port Elizabeth

info@safetech.co.za

PO Box 80171

Doornpoort

Pretoria 0017

Greenacres

6057





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### Steps to a Safer Office

It's fairly obvious that safety and health hazards can exist on worksites filled with heavy machinery and equipment, where employees often are required to engage in strenuous manual labour. A job where most of the work tasks are completed while sitting in a chair, in an air-conditioned office building would seem less fraught with danger. However, a surprising number of hazards can be present in an office setting.



A few steps that can be taken to reduce the risk of injury among office staff are as follows:

### Stay Clutter-Free

Boxes, files and various items piled in walkways can create a tripping hazard. Be certain that all materials are safely stored in their proper location to prevent build-up of clutter in walkways. Stretching cords across walkways or under rugs creates a tripping hazard, so ensure all cords are properly secured and covered.

### Step on Up

Standing on chairs, particularly rolling office chairs, is a significant fall hazard. Workers who need to reach something at an elevated height should use a stepladder. Workers should never climb higher than the step indicated as the highest safe standing level.

Marble or tile can become very slippery, particularly when wet. Placing carpets at entranceways, where workers are likely to be coming in with wet shoes from rain, can serve to reduce falls.

### **Shut the Drawer**

Filing cabinets with too many fully extended drawers could tip over if they are not secured. Additionally, open drawers on desks and file cabinets pose a tripping hazard. Ensure that drawers are completely closed when not in use.

### Safe Stacking

Large stacks of materials and heavy equipment can cause major injuries if they are knocked over. The load capacity of shelves or storage units should never be exceeded.

# HWSETA

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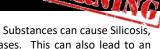




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Refer to www.sanas.co.za for Schedule of Accreditation

### **CRYSTALLINE SILICA DUST and TUBERCULOSIS**



Worker exposure to Crystalline Silica Dust and other hazardous Chemical Substances can cause Silicosis, other lung diseases and cancer, which at times, can be incurable diseases. This can also lead to an increased risk of contracting TB.

It is thus vitally important to reduce the Crystalline Silica exposure of workers to as low as possible levels, as the current occupational exposure limit (OEL) is 0.1mg/m3. There is a move internationally to reduce this limit to 0.05mg/m3. The South African Department of Labour has even suggested reducing the OEL further to 0.025mg/m3.

### To prevent Silicosis, the Employer will need to:

- Comply with current OEL's and, if possible, improve on them;
- Conduct air monitoring and implement corrective actions where OEL's have been exceeded;
- Substitute Crystalline Silica with less hazardous materials, where possible;
- Provide appropriate equipment and instruct workers to vacuum, hose down or wet sweep work areas instead of dry sweeping;
- Provide training on health effects, engineering controls, work practices and the importance of maintenance & good house-keeping;
- Provide appropriate approved respirators when engineering controls are insufficient.

Source: http://www.labour.gov.za/DOL/downloads/documents/useful-documents/occupational-health-andsafety/UsefulDocument/Silicosis.pdf



**ENVIRONMENT**