



### WE PROVIDE A NUMBER OF DIFFERENT SERVICES TO ASSIST OUR CLIENTS THAT INCLUDE:

- 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



HW592A1000508



OH0049



DoL Approved Inspection Authority (OH0049-CI-09)

Newsletter compiled by  
Lee Rands

## ISOCYANATES



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.

## 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

**R1500**  
exclVAT

*Bookings are essential*



**21st August**  
9am – 3pm

St Georges Club,  
Central,  
Port Elizabeth

Lee Rands 041 3656846

## training

### Public Course Calendar Port Elizabeth



#### AUGUST

- 22<sup>nd</sup> Construction Regulations
- 30<sup>th</sup> – 31<sup>st</sup> ISO 14001 & 45001 Internal Auditing (combined)
- 31<sup>st</sup> Introduction to Environmental Legislation

#### SEPTEMBER

- 10<sup>th</sup> SHE Reps (Refresher)
- 11<sup>th</sup> Local Exhaust Ventilation Workshop
- 14<sup>th</sup> Fire Prevention
- 25<sup>th</sup> – 27<sup>th</sup> SHE Reps
- 28<sup>th</sup> Hazardous Chemical Substances Regulation

#### OCTOBER

- 4<sup>th</sup> – 5<sup>th</sup> Incident Investigation
- 16<sup>th</sup> – 18<sup>th</sup> Basic Principles in Occupational Hygiene
- 26<sup>th</sup> Introduction to the OHS Act

#### NOVEMBER

- 5<sup>th</sup> – 6<sup>th</sup> HIRA
- 9<sup>th</sup> Hazardous Chemical Substances
- 20<sup>th</sup> – 21<sup>st</sup> Advanced OHS Act

Safetrain cc t/a Safetech is a SANAS Accredited Inspection Body, No. OH 0049. Refer to [www.sanas.co.za](http://www.sanas.co.za) for Directory Accredited Facilities, Inspection Bodies for schedule of accreditation.



# SAFETECH

ENVIRONMENT  
HEALTH  
SAFETY





#### Southern Office

PO Box 27607  
Greenacres  
Port Elizabeth  
6057

Tel: +27 (0)41 365 6846  
Fax: +27 (0)41 365 2123

info@safetech.co.za

#### Northern Office

PO Box 80171  
Doornpoort  
Pretoria  
0017

Tel: +27 (0)82 4111 571  
Fax: +27 (0)86 6579 864

carlita.westoby@safetech.co.za



HW592A1000508



OH0049



DoL Approved Inspection  
Authority (OH0049-CI-09)

Refer to [www.sanas.co.za](http://www.sanas.co.za)  
for Schedule of Accreditation

#### 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.

##### Get a Grip

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.

## 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/m<sup>3</sup>. There is a move internationally to reduce this limit to 0.05mg/m<sup>3</sup>. The South African Department of Labour has even suggested reducing the OEL further to 0.025mg/m<sup>3</sup>.

#### 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-and-safety/UsefulDocument/Silicosis.pdf>



# SAFETECH

ENVIRONMENT  
HEALTH  
SAFETY

