

ILO Chemical Control Toolkit

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InFocus Programme on safety
and health at work and the
environment
(SafeWork)

Outline

- Background
- Scope of toolkit
- Overview of toolkit

Background

- Scheme for Workplace Chemicals Control Kit designed for SMEs in developing countries
- Work undertaken by experts from ILO, IOHA, USA, South Africa, HSE
- Generic risk assessment based on GHS and task guidance sheets
- Aim is to provide simple and practical means to prevent/reduce risks of chemicals



Scope

- Many substances used at work contain chemicals
- Guidance should be provided to ensure safe handling
- Does not cover process generated dusts and fumes
- Based on the HSE's COSHH Essentials kit

Toolkit operation

Five stages:

- Hazard classification
- Scale of use
- Ability to become airborne
- Finding the control approach
- Finding the task-specific control guidance sheet(s)



Stage 1: Hazard classification

- Determination of hazards presented by the chemicals (based on the GHS)
- 6 hazard groups (A-E inhalation, S contact)
- Simple 3-step reference table allows hazard group to be assigned to the chemical

Stage 2: Scale of use

- Determines how much is used/handled

Quantity	Solid		Liquid	
	Weight	Typically received in	Volume	Typically received in
Small	Grams	Packets or bottles	Millilitres	Bottles
Medium	Kilograms	Kegs or drums	Litres	Drums
Large	Tonnes	Bulk	Cubic metres	Bulk

Stage 3: Ability to become airborne

- Physical form of chemical affects how likely it is to get into the air
- Solids – 3 levels of dustiness (low-pellets, medium-crystalline, high-powder)
- Liquids – 3 levels of volatility (High- $B_{pt} < 60^{\circ}C$, Medium- $60^{\circ}C < B_{pt} < 150^{\circ}C$, Low- $B_{pt} > 150^{\circ}C$)



Stage 4: Selection of control approach

- Stages 1-3 enable the choice of control approach to be made using table
- 4 control approaches possible: general ventilation, engineering controls, containment and Special
- Table overleaf allows for easy identification



Control approach selection

Amount used	Low dustiness or volatility	Medium volatility	Medium dustiness	High dustiness or volatility
Hazard group A				
Small	1	1	1	1
Medium	1	1	1	2
Large	1	1	2	2
Hazard group B				
Small	1	1	1	1
Medium	1	2	2	2
Large	1	2	3	3
Hazard group C				
Small	1	2	1	2
Medium	2	3	3	3
Large	2	4	4	4
Hazard group D				
Small	2	3	2	3
Medium	3	4	4	4
Large	3	4	4	4
Hazard group E				
For all hazard group E, substances, choose control approach 4				

Stage 5: Find the task-specific guidance sheet(s)

- General guidance sheet for each approach
- Development of a range of simple and practice task specific control guidance sheets is planned

Where to get more information

- SafeWork Website
(www.ilo.org/safework)
- Pavan Baichoo, ILO (baichoo@ilo.org)
- Carolyn Vickers, WHO, PCS
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Thank you

