



## COSSH Assessments

To ensure that the Control of Substances Hazardous to Health Regulations 2002 (COSHH) are applied to all relevant materials on an organisations site.

This procedure does not cover handling of large (>1kg) chemical spills.

### OUTCOMES

1. Material Safety Data Sheets (MSDSs) will be accessible for all hazardous chemicals used on site.
2. Representatives from all areas handling hazardous substances trained as assessors.
3. COSHH assessments available for activities involving hazardous substances (performed on a prioritised basis) and are accessible.
4. The assessments are reviewed regularly.
5. Service providers (i.e. contractors) will be responsible for their own COSHH assessment systems – the effectiveness of these will be verified by periodic audit.

### DEFINITIONS

*Hazardous Substances are:*

- **Chemicals purchased that require a health warning label**
- **Dusty materials e.g. icing sugar**
- **Biological agents e.g. *Legionella***



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### PROCEDURE

#### Material Safety Data Sheets (MSDSs)

Action	Responsibility
All chemicals purchased for will have an up to date MSDS obtained from the current Supplier and forwarded to the prime contact.	Chemical Purchaser
A hard copy file of all MSDSs will be kept in a central location (e.g the laboratory). Electronic copies can also be maintained if appropriate	Person responsible for the COSHH System

### COSHH ASSESSMENTS - PURCHASED CHEMICALS

#### Purchased Chemicals

All COSHH assessments should be made using the system described in HSE publication "COSHH Essentials, Easy steps to control chemicals" also available as an on-line system a [www.coshh-essentials.org.uk](http://www.coshh-essentials.org.uk)

#### Procedure - Assessor

1. Normally, a COSHH assessment will be done for each chemical used in a job. However, it is recognised that for some activities, i.e. laboratory analytical tests, which make almost simultaneous use of a number of chemicals, this could lead to a lot of repetition. In this case, all the chemicals used can be entered on the COSHH form, and the assessment based on the highest hazard chemical.



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2. Obtain the MSDS for the chemical.
3. Get the risk phrase(s) from the MSDS and assign the chemical to a health hazard group A – E (& S) using the HSE matrix (if there are a number of risk phrases falling in different hazard groups, use the highest). If no risk phrases given, use hazard group A.
4. Classify amount used as small, medium, or large using HSE guidelines.

Amount used		Rating
Solid	Liquid	
Grams	Millilitres	<b>Small</b>
Kilograms	Litres	<b>Medium</b>
Tonnes Cubic	Metres	<b>Large</b>

5. For solids, estimate dustiness as low, medium, or high, using HSE guidelines.

Characteristics	Dustiness
Pellet like solids that don't break up and little dust generated.	<b>Small</b>
Crystalline or granular solids. Some dust but quickly settling.	<b>Medium</b>
Fine light powders. Dust clouds form when handled and remain in air for several minutes.	<b>Large</b>



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6. For liquids, estimate volatility using boiling point and operating temperature.

Boiling point	Volatility at room temperature
Less than 50° C	<b>High</b>
50° C to 150° C	<b>Medium</b>
Greater than 150° C	<b>Low</b>

For different operating temperatures, use the HSE volatility graph

7. Apply the health hazard group, amount, and dustiness/volatility to the HSE risk matrix to find out the degree of control recommended.

Control ranking	Control approach	Examples
1	<b>General ventilation</b>	low risk: use good housekeeping approach.
2	<b>Engineering control</b>	Provide local plant to remove any dust or vapour generated during use.
3	<b>Containment</b>	Design operation to avoid exposure to the chemical.
4	<b>Special</b>	Highest risk: obtain expert advice on handling.



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Hazard rating	Control approach	Examples
S	<b>Protect skin and eyes</b>	Design operation to reduce risk of splashing or other contact with corrosive chemicals.
	<b>Select and use PPE</b>	Identify suitable personal protective equipment (e.g. goggles) to protect against inadvertent contact with corrosives.

8. If daily exposure is limited to <30 mins / day, then the responsible person may decide that containment can be reduced to engineering control or engineering control to general ventilation.

Initial control approach from assessment	Potential control approach if exposure < 30 mins / day
General ventilation	General ventilation
Engineering control	General ventilation
Containment	Engineering control
Special	Special

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9. Based on the outcome of the assessment and using info. From the MSDS, determine the following:

**Specific control measures** - what controls need to be operating when handling the chemical.

**Personal protective equipment** - what needs to be used (should be mainly when handling corrosives).

**Other safety and environmental issues** - record any other safety issues with the chemical (e.g. flammability) and how to deal with small (← 1kg) spillages.

**Further action requires** - if existing operations do not meet the requirements of the COSHH assessment, record what improvement actions are needed, who is responsible, and the target date.

10. Record the results of the assessment on the COSHH assessment form.

11. Assessments need to be signed by the assessor and reviewed and signed by the manager responsible for implementing the control measures.

12. Make the COSHH assessment or just the work instructions available at the workplace (this may be on TaLnet or as a hardcopy depending on availability).

13. A hardcopy file of all completed COSHH assessments must be kept (eg in the laboratory).

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### **COSHH ASSESSMENTS - SPECIALS**

Dusty materials, biological agents, natural materials, substances arising from work activities. do not lend themselves to the HSE approach, and so should be assessed using methodology most appropriate to the substance.

### **CONTRACTOR ACTIVITIES**

Contractors are responsible for having effective COSHH assessments that the substances they use. Their systems will be periodically audited by the prime contact.

### **MEASUREMENT, EFFECTIVENESS & CONTINUOUS IMPROVEMENT**

The relevant COSHH assessment will be reviewed for effectiveness if an injury is caused by a hazardous substance.