Handling dangerous substances

Safety instructions
Lesson 1

Where are dangerous substances found?

• Dangerous substances are found at the work place, and in private areas

• Dangerous substances can be solid, liquid, gaseous and dusty

• As a rule, dangerous substances are labelled as such – but not always
Lesson 2

Rights of employees

• Requesting operating instructions and manuals as a source of information
• Having incomprehensible points explained by superiors
Lesson 3

Duties of employees

• Observing operating instructions and hygiene regulations
• Correctly employing protective measures
• Using required personal protective gear
• Working safely – no improvisation
Lesson 4

Inquiries permitted!

• In case of discrepancies and uncertainties: STOP!
• Informing and asking superiors
Lesson 5

Showing consideration

- Watching out for others when handling dangerous substances
- Avoiding alternating hazards
Find the seven mistakes
Mistake 1

No eating and drinking in areas with hazardous substances
Mistake 2

Storing liquid dangerous substances in collection trays and basins
Mistake 3

Wearing required personal protective gear
Mistake 4

No disposing dangerous substances with regular waste
Mistake 5

No storing dangerous substances in food containers
Mistake 6

Containers not labelled
Mistake 7

Secure gas cylinders to not fall over
Notes

Topic:

These safety instructions address the main aspects of safely handling hazardous substances which can be dangerous to the health. Such hazardous substances cannot be found only in chemical enterprises: Among them are various solvent and diluting agents, cleaning agents and disinfectants, oils and cooling lubricants, as well as adhesives which are used in different sectors. Some are even used privately.

Dangerous substances are – for one - liquids, gases, or solids which have to be labelled accordingly. Even substances without labelling requirements like flour dust or wood dust can have adverse health effects. In addition, there are substances like welding fumes or diesel motor emissions, which develop or emerge during processing (lesson 1).

Supervisors/superiors are obliged to provide their employees with operating instructions and to convey these in a comprehensible way so that employees can protect themselves correctly at work (lesson 2). In turn, employees have the duty to observe these instructions, to employ technical, organizational, and personal protective measures according to regulations, and to avoid makeshift solutions (lesson 3).

Encourage your employees to consult superiors/supervisors in case of discrepancies and uncertainties concerning regulations (lesson 4). And remind them to watch out for other employees and avoid alternating hazards when handling dangerous substances (lesson 5).

Explanations on the pictograms labelling dangerous substances can be found, for instance as a videoclip, at www.ivss-chemie.de (subpoint “media”).

Method:

The set of slides is intended to help managers instruct staff and involve them in open discussion on the topic of occupational safety. This can also be completed on site.

The text and images included in the introductory units provide information on which aspects are most important to the topic. Using this as a basis, discussions should be held on whether and where similar issues occur at the company in question, which specific technical and organisational measures are already in place, and which solutions could improve the situation. Safety training can thus be used not just to fulfil legal requirements but also as a tool for promoting ongoing improvement within the company.

Analysing thematically related events and “near misses” at the company (or other incidents known of from literature) can help the staff involved become aware of the relevance of the topic and thus encourage safety-conscious conduct for the long term. This may require further preparation and/or research.

Also included is a picture that can be used to check what has been learned. This can be carried out either with the whole group straight after the training session using the solution slides, as an independent follow-up activity with the solutions revealed at a later stage, or as part of an in-house (safety-themed) event, possibly with prizes.

The content of the safety courses is always focused on the staff involved. They therefore do not include information on measures to be undertaken by the employer.