

Handling hazardous substances

Training tool for safety instructions



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.

Hazardous 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).

For some more information, e. g. the explanation of the pictograms that identify hazardous substances, have a look at the [issa chemistry media shop](#).

Method:

This training tool is not to be used for E-learning. The set of slides is intended to assist managers for the personal instruction of employees and to start an open discussion on the topic of occupational safety.

Text and images included in the lessons 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 instructions 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.

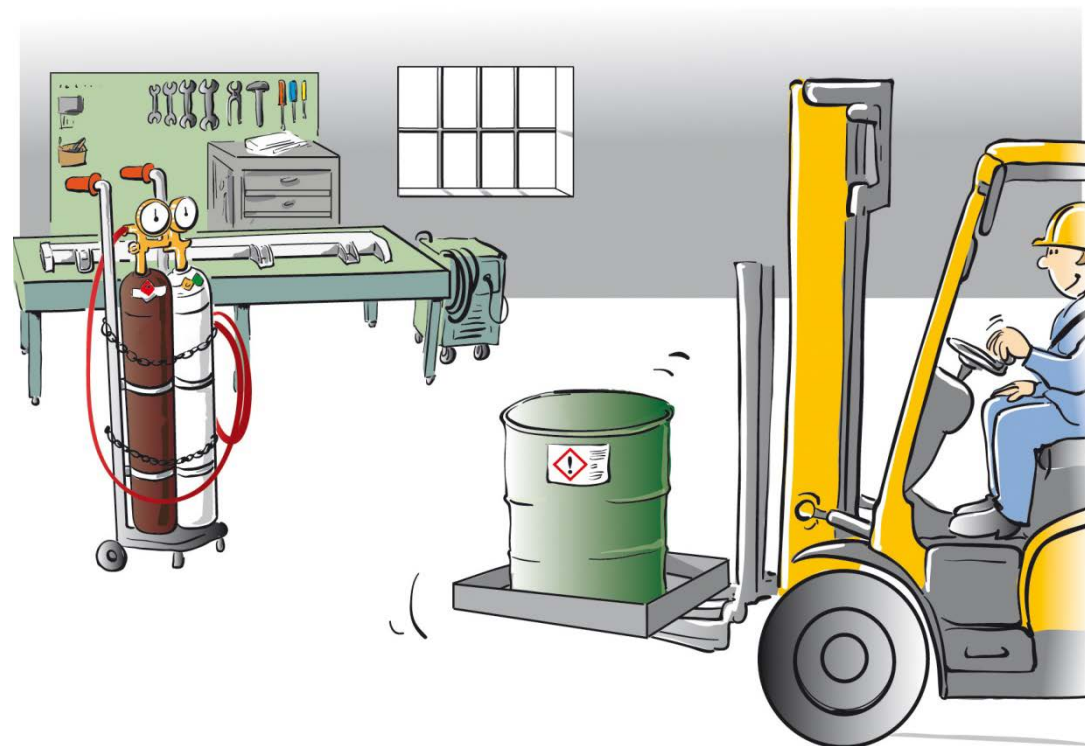
The content of the safety courses is always focused on the staff involved. They therefore do not include information on measures to be undertaken by the employer.



Lesson 1

Where hazardous substances are used?

- Hazardous substances are used at the work place, as well as in private areas
- Hazardous substances can be solid, liquid, gaseous and dusty
- As a rule, hazardous substances are labelled as such – but not always





Lesson 2

Rights of employees

- Request operating instructions and manuals as a source of information
- Have incomprehensible points explained by superiors

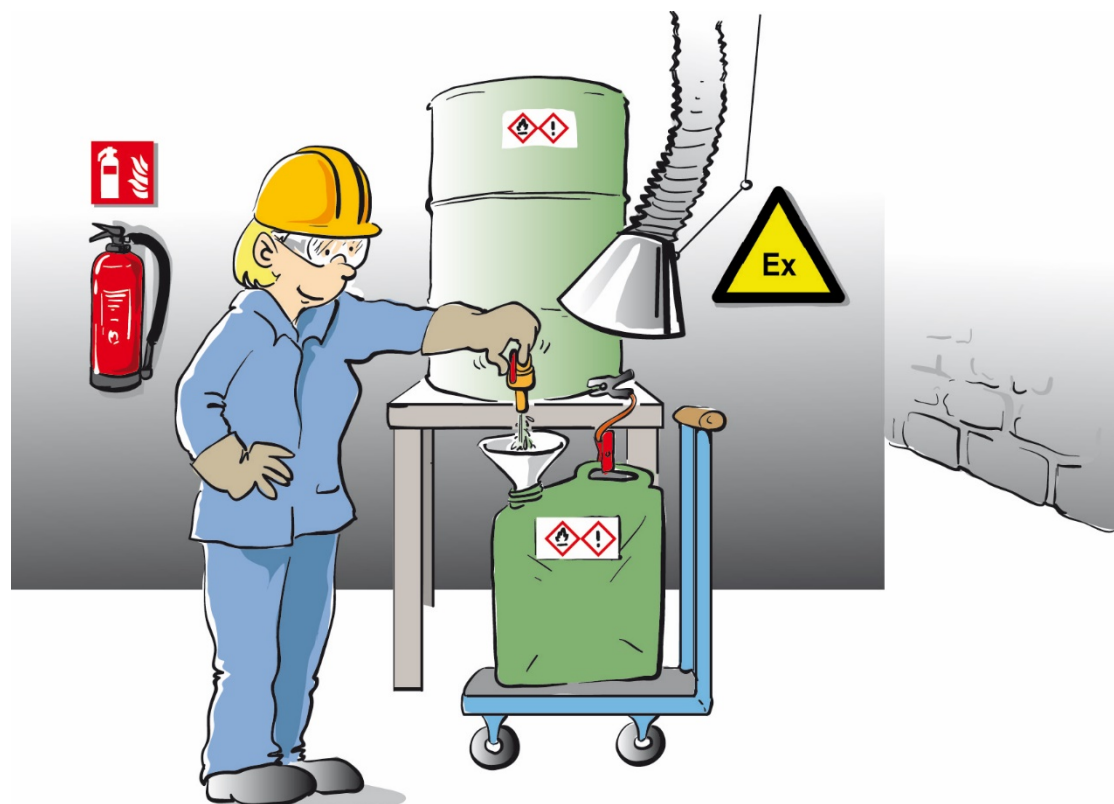




Lesson 3

Duties of employees

- Observe operating instructions and hygiene regulations
- Employ protective measures correctly
- Use required personal protective equipment
- Work safely – no improvisation





Lesson 4

Inquiries permitted!

- In case of discrepancies and uncertainties: STOP!
- Inform and ask superiors





Lesson 5

Showing consideration

- Watch out for others when handling hazardous substances
- Avoid alternating hazards





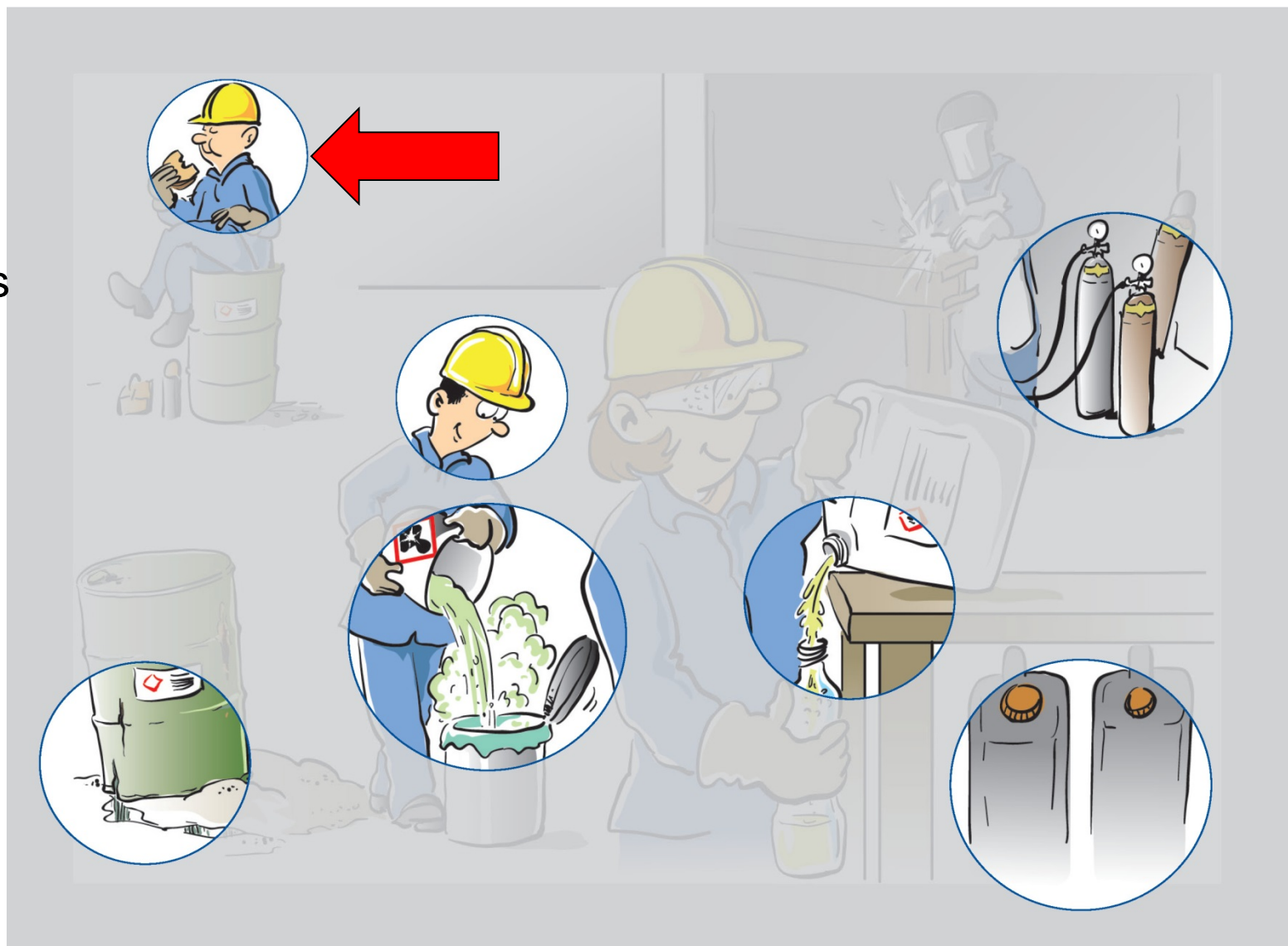
What's wrong? Find the seven mistakes





Mistake 1

No eating or drinking
in areas with
hazardous substances





Mistake 2

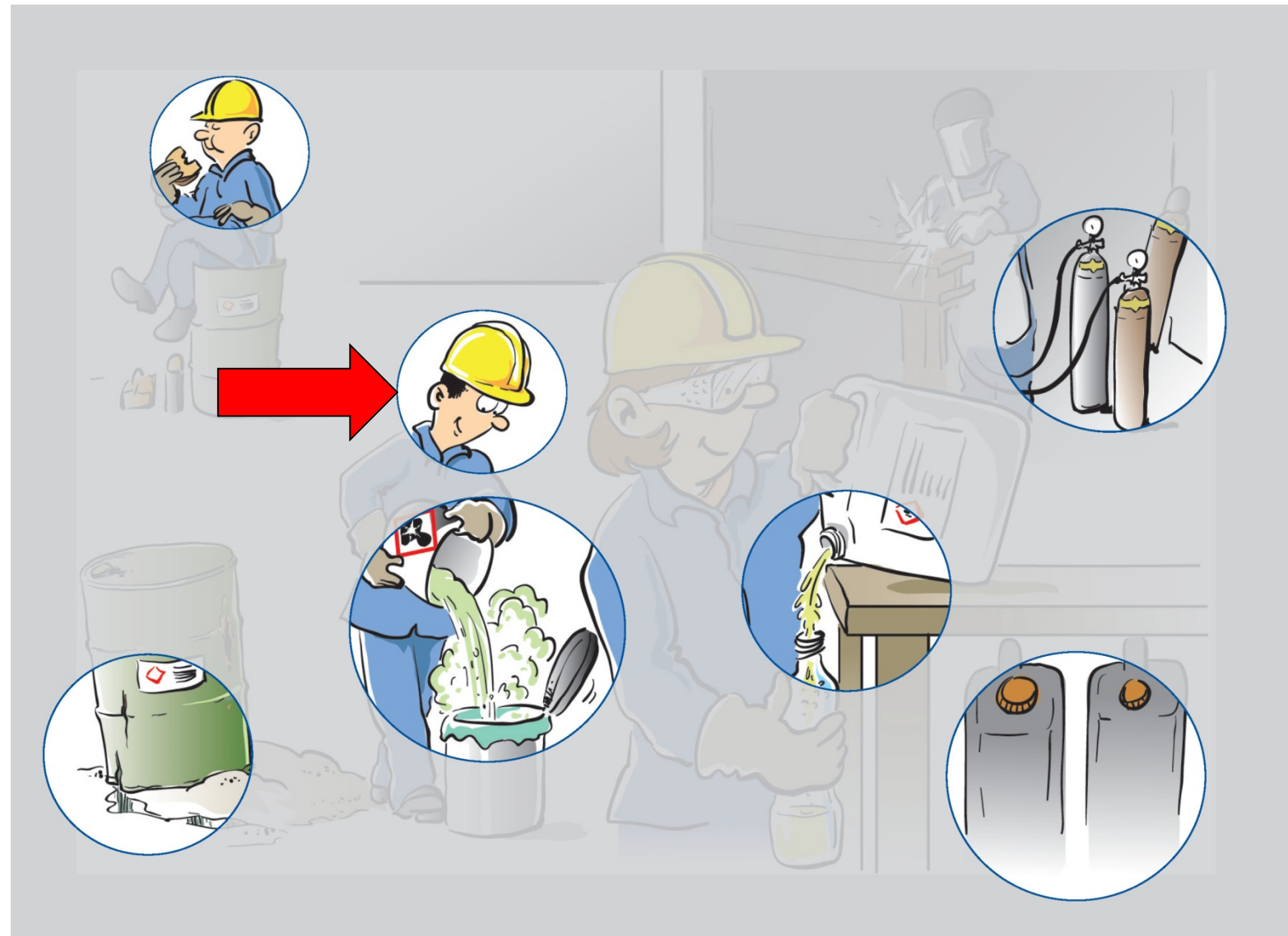
Store liquids in trays and basins





Mistake 3

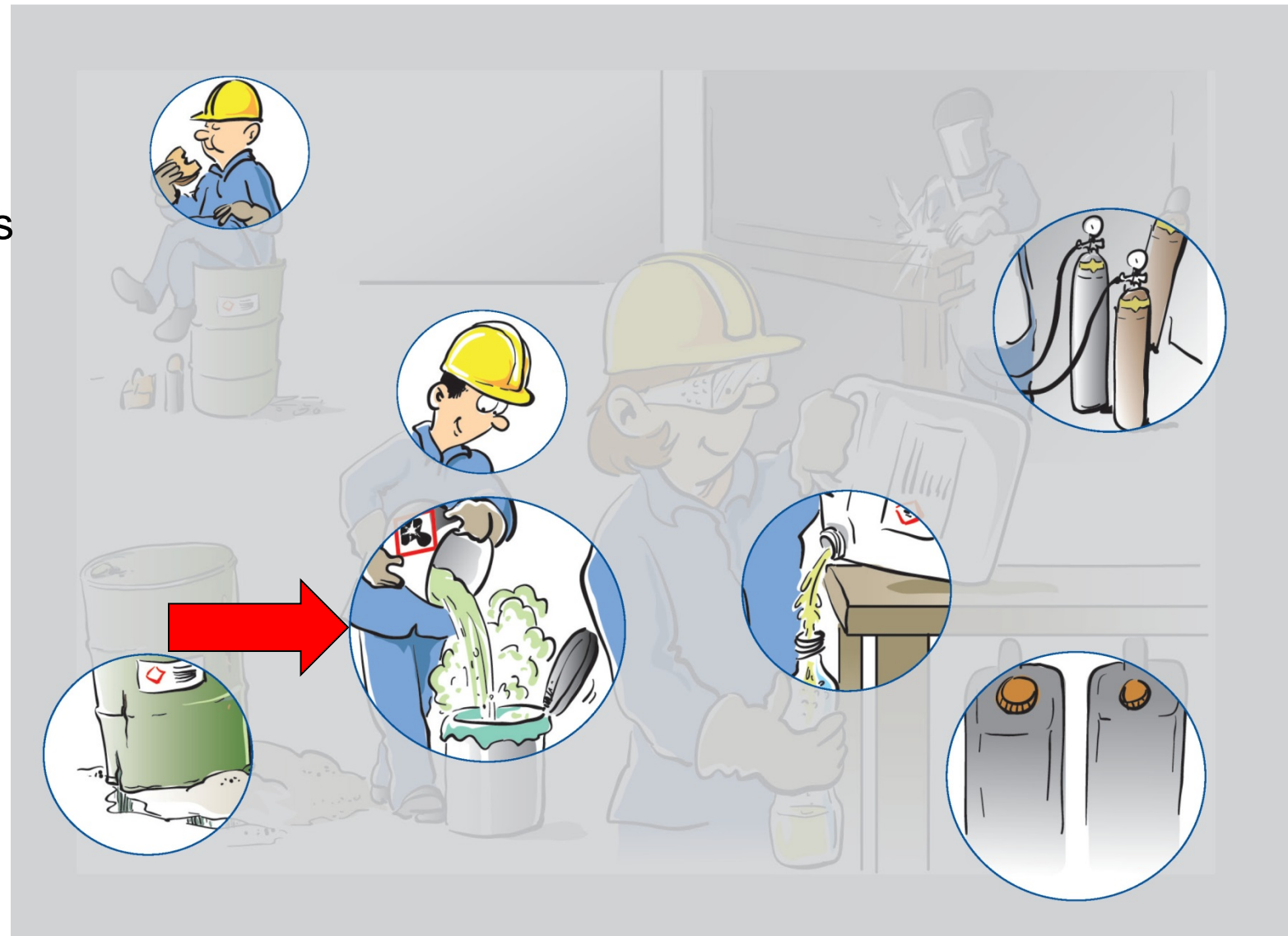
Wear required personal protective equipment





Mistake 4

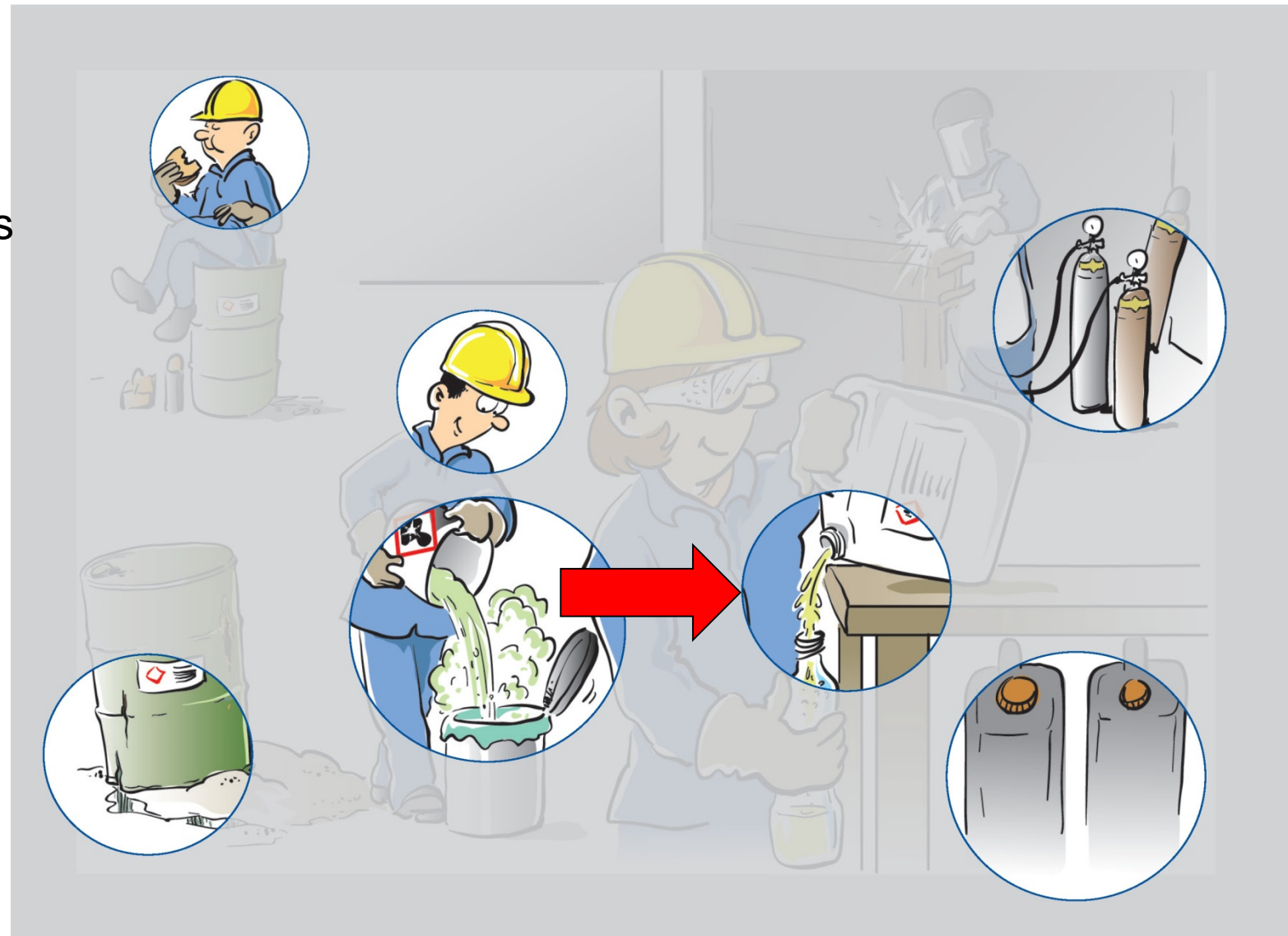
No disposing of hazardous substances with residual waste





Mistake 5

No storing of hazardous substances in food containers





Mistake 6

Label containers clearly

