Legal framework

Safe hazardous substance storage – a burning topic

The safe handling of hazardous goods is one of the most important tasks relating to employee health protection in the company. The employer is assigned a range of responsibilities. The employer must determine the potential hazard of the substances used as well as the work processes and take appropriate safety measures to protect people against health risks and the environment against substance-related damage.

An important part of these safety measures is the proper storage of hazardous substances, on which SSI SCHAEFER can provide comprehensive consulting services for all related issues. Naturally our warehouse systems conform to the latest technological standards and are therefore secure modules in the safety concept at your company.

Laws and regulations (excerpt)

- DIN EN 14470-1
- Operational Safety Ordinance
- Technical Regulations on Flammable Liquids
- German Water Management Act
- Water hazard classes
- Steel tub directive
- MDT

Standard valid across Europe for the manufacture of safety cabinets.

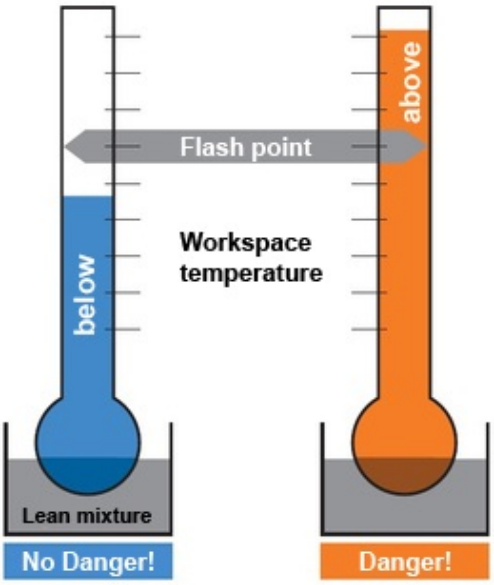
The primary objective is to minimise the fire risk in connection with the storage of flammable substances and the protection of the content of cabinets in the event of a fire.

Article 3 Paragraph 3 of the German Hazardous Goods Act

defines inadmissible storage, if hazardous substances are being held longer than 24 hours unprotected at the work place.

Hazardous material	Classification	Flash point (in °C)	Autoignition Temperature (in °C)
Ether	Extremely flammable	< -20	180
Ethyl acetate	Extremely flammable	-4	460
Acetone	Extremely flammable	< -20	540
Benzene	Highly flammable	11	555
Toluene	Highly flammable	4	535
Ethanol	Highly flammable	12	425
Methanol	Highly flammable	11	455
White spirit	Flammable	35 (21-55)	ca. 240
Petroleum	Flammable	21-55	ca. 260
Turpentine	Flammable	33	255
Xylene	Flammable	30	465
Without Classification (former AIII)			
Diesel		55	ca. 220
Heating oil		> 55	220
Nitrobenzene		88	480
Tetralin		77	425

Examples of the hazard classes



Definition of flash point (FP)
The flash point is the temperature (at normal pressure), at which the solvent vapours together with the ambient air form a mixture that could be ignited on contact with a source of ignition.