


PRACTICAL INFORMATION 8

The storage of flammable liquids is regulated in the GefStoffV and BetrSichV. Regarding the storage of hazardous substances in mobile container the requirements have been included in the TRGS 510. The TRGS 510 reflects requirements in the numbers 4,5,6 and 12 as well as the annex 1 which comply with the state of the art in respect of compliance with an implementation of these requirements.

The TRGS 509 deals with the storage of flammable liquids in stationary containers and in particular with mobile container filling and emptying points. The requirements of this guideline are to be considered, if in a warehouse containers are opened for withdrawal and filling. Here then takes place an „active storage“, in contrast to a „passive storage“ in which the containers are not opened. In practice, this has a considerable influence on the measures to be taken for explosion protection and zoning.

According to CLP, the inflammatory fluids are classified in

| Designation | Category | Symbol | Signal word | H-phrase | Criteria |
|---------------------|----------|---|-------------|----------|-----------------------------|
| extremely flammable | Cat. 1 |  | Danger | H224 | FP < 23 °C SB ≤ 35 °C |
| easy flammable | Cat. 2 | | Danger | H225 | FP < 23 °C SB ≥ 35 °C |
| flammable | Cat. 3 | | Attention | H226 | FP ≥ 23 °C up to ≤ 60 °C |

FP = Flash point SB = Boiling point

In addition to the TRGS 510, the GefStoffV § 11 and Annex 1 No. 1, in particular, stipulates special regulations for fire and explosion hazards which must be observed.

Quantity limits:

| VO | What | Quantity limit | Related |
|----------------------------------|--|---------------------------|---------------------------------------|
| BetrSichV | Permission § 18 | 10.000 l | extremely flammable easy flammable |
| BlmSchG i.V.m. 4. BlmSchV | § 19 Authorization | ≥ 5.000 t up to <10.000 t | FP < 21 °C SB > 20 °C |
| | § 10 Authorization | ≥ 10.000 t | FP ≤ 100 °C |
| BlmSchG i.V.m. 12. BlmSchV | § 23a also display possible § 23b Authorization | ≥ 10.000 kg | extremely flammable |
| | | ≥ 5.000.000 kg | easy flammable flammable |
| | | ≥ 50.000 kg | extremely flammable |
| | | ≥ 50.000.000 kg | easy flammable flammable |

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Temporal change in the classification of flammable liquids

| VbF 31.12.2002 | | BetrSichV and GefStoffV from 01.01.2003 | | | | GHS from 20.01.2009 with periods of transition | | | |
|-------------------|--|--|---------------|----------|-----------------------------|---|----------------------------|----------|-----------------------------|
| Designation | Criteria | Designation | Hazard symbol | R-phrase | Criteria | Designation | Hazard symbol | H-phrase | Criteria |
| AI | FP < 21 °C | highly flammable | F+ | R12 | FP < 0 °C SB ≤ 35 °C | extremely flammable | Cat. 1, Flame Danger | H224 | FP < 23 °C SB ≤ 35 °C |
| | | easy flammable | F | R11 | FP < 21 °C | easy flammable | Cat. 2, Flame Danger | H225 | FP < 23 °C SB > 35 °C |
| AII | FP ≥ 21 °C up to ≤ 55 °C | flammable | without | R10 | FP ≥ 21 °C up to ≤ 55 °C | flammable | Cat. 3, Flame Attention | H226 | FP ≥ 23 °C up to ≤ 60 °C |
| AIII | FP ≥ 55 °C up to ≤ 100 °C | - | - | - | - | - | - | - | - |
| B | FP < 21 °C, at 15 °C in Water soluble | highly flammable | F+ | R12 | FP < 0 °C SB ≤ 35 °C | extremely flammable | Cat. 1, Flame Danger | H224 | FP < 23 °C SB ≤ 35 °C |
| | | easy flammable | F | R11 | FP < 21 °C | easy flammable | Cat. 2, Flame Danger | H225 | FP < 23 °C SB > 35 °C |
| - | - | flammable | without | R10 | FP ≥ 21 °C up to ≤ 55 °C | flammable | Cat. 3, Flame Attention | H226 | FP ≥ 23 °C up to ≤ 60 °C |

The list is purely informative and gives a simplified overview without claiming to be complete. It is not intended to classify substances or mixtures. This must be done according to the valid regulations exclusively.

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