

Rules for Storage of Flammable Solvents in Laboratories

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According to advice from the municipal Fire Department, the following rules apply in research laboratories:

Each laboratory is permitted to store up to 50 ‘Stock Units’ (‘Oplagsenheder’) of flammable liquids.

In terms of quantities you are permitted to keep in storage, flammable liquids are categorized in three groups according to their Flash Point (‘flammepunkt’)

Group	Flash Point Range	Examples	Flash Point (°C)
I	Below 21°C	Ethanol	12
		Acetone	-18
		Methanol	11
		Acetonitrile	6
		Diethylether	-40
		Isopropanol	12
II	Between 21°C and 55°C	1-Butanol	34
		2-Butanol	24
		Acetic acid	40
III	Above 55°C	Formic acid	60
		DMF	62
		DMSO	85

Flash points for other solvents, see e.g. CRC Handbook of Chemistry & Physics or www.biosite.dk/leksikon/solvent.htm

One ‘Stock Unit’ corresponds to	1 Litre Group-I solvent, or 5 Litres Group-II solvent, or 50 Litres Group-III solvent.
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Therefore, 50 ‘Stock Units’, the total amount of solvent permitted per laboratory may for example comprise:

40 Litres of ethanol, methanol, acetone (Group-I solvents; 40L = 40 Stock Units), and
50 Litres of acetic acid, butanol or other Group-II solvents (50L = 50/5 = 10 Stock Units)

Be aware that additional safety rules apply. E.g. you obviously have to store and use any volatile chemical substance in properly ventilated lab furniture.