

# Dimethylether



## PERFORMANCES

**Dimethylether**, or DME, is a very flammable, slightly toxic gas.

It is used in the chemical industry for synthetic rubbers manufacturing and dimethylsulfate production.

## SPECIFICATIONS

Standard characteristics	Limit values
Appearance	clear
Purity	≥ 99,9 % weight
Moisture content	≤ 100 ppm weight
High boiling residue	≤ 10 ppm weight

## CHARACTERISTICS

		Units	Values
Chemical Formula			<b>CH<sub>3</sub>-O-CH<sub>3</sub></b>
Molecular weight		g/mol	46,1
Boiling point	at 1,013 bar	°C	-24,8
Liquid density	at 20 °C	kg/dm <sup>3</sup>	0,666
	at 50 °C	kg/dm <sup>3</sup>	0,612
Relative pressure	at 20 °C	bar	4,2
	at 50 °C	bar	10,3
Kauri-Butanol index			91
Solubility parameter			7,3
Dimethylether solubility	in water at 20 °C	% in weight	34
Water solubility	in dimethylether at 20 °C	% in weight	6
Flammability limit	In the air at 20° C below 1,013 bar		
Lower limit		% volume	3,4
Upper limit		% volume	27
Auto-ignition temperature		° C	350

## PACKAGING

	Bottles		Container	Bulk
Capacity (liter)	26	88	930	5 to 20 T
Tare (kg)	16	38	460	
Load (kg)	15	50	530	
Diameter (mm)	300	300	860	
Height (mm)	630	1530	2330	
Outflow external diameter (mm)	21,7	21,7	26,1	
Tap : left pitch (mm)	1,814	1,814	1,814	
Test pressure (bar)	30	33	33	

- Packaging technical characteristics are available upon request to the commercial department.
- Feasibility of filling packaging of the customers if they are in conformity with the legislation.
- Contact us for any other specific packaging.

## STORAGE AND SHELF LIFE

### Precautions for handling and storage:

**French plants are controlled by the regulation of listed Establishments and have to comply with it (or with the local legislation).**

- All packaging will be stored in a dry, well-ventilated, easily accessible place, sheltered from sunlight and bad weather, away from any ignition source.
- It is recommended to store all packaging either in a specific place or isolated and sheltered by a fence.
- All packaging and piping will be grounded to discharge static electricity.
- Leak detectors, put at ground level, will be connected to an audible alarm, which will trigger in the event of leaks.
- The whole equipment will be tested with an appropriate leak detector before use.
- Material and electrical equipment in an explosive atmosphere will comply with the regulations (*grounding, equipotential bonding, ATEX material*).

**INVENTEC can study the set up and assembling of your storage tanks, piping, and pumps, according to the prevailing regulations.**

## CONDITIONS OF USE

Please refer to the Material Safety Data Sheet (MSDS) before using the product.

Workers handling the product should be trained about risks and preventive measures.

Dimethylether is compatible with :

- The following plastics :
  - ✓ Teflon<sup>®</sup>
- The following elastomers :
  - ✓ Buna N<sup>®</sup>
- The following metals :
  - ✓ Carbon steel

Dimethylether has a poor resistance with :

- ✓ Neoprene<sup>®</sup>
- ✓ Hypalon<sup>®</sup>
- ✓ Butyl rubber

Dimethylether is not compatible with :

- ✓ Viton<sup>®</sup>
- ✓ Silicon rubber
- ✓ Natural rubber
- ✓ Strong bases
- ✓ Oxidizing agents
- ✓ Combustive agents

## HEALTH SAFETY AND ENVIRONMENT (HSE)

Consult the Material Safety Datasheet (MSDS) on the website : [www.quickfds.com](http://www.quickfds.com)

*This data is based on information that the manufacturer believed to be reliable and offered in good faith. On no account, Inventec will be responsible for special, incidental and consequential damages. The user is responsible, to the Administrative Authorities (Regulation of the listed establishments for the protection of the environment), for the conformity of his installation.*