

# Methyl chloride

## VESTOLIT Base Chemicals

At room temperature, gaseous alkyl chloride with a light, sweet smell, easily compressible to a colorless liquid. Methyl chloride is used as an intermediate product for the synthesis of methylated cellulose, n-methyl ammonium compounds and silicones.

### Classification

- Methyl chloride CH<sub>3</sub>Cl
- Monochlormethane
- Chlormethane
- CAS-No. 74-87-3
- Molar mass: 50.49 g/mol

### Applications

- Butyl rubber
- Chemical industry (alkylation)
- Detergents (Quat. ammonia compounds)
- Methyl cellulose
- Silicones

### Delivery data

Properties	Method <sup>1)</sup>	Unit	Value
Purity (GC)	DIN 51 619	% (m)	≥ 99.9
Nonvolatile matter	ASTM D 2109	mg/kg	≤ 100
Water content	DIN EN ISO 10101	mg/kg	≤ 20
Methanol content	DIN 51 619	mg/kg	≤ 50
Acidity (as HCl)	ASTM D 2989	mg/kg	≤ 10

<sup>1)</sup> based on the standard which are in force

### Physical Data (Literature information)

Characterization		Unit	Value
Boiling temperature	at 1013 hPa	°C	-23.9
Density	at 20 °C and 4,9 bar	g/cm <sup>3</sup>	0.921
Specific heat	in steam at -23,9 °C	kJ/kg K	0.833
Specific heat	in liquid at 20°C	kJ/kg K	1.595
Heat of vaporisation at boiling point		kJ/kg	428.8
Vapor Pressure	approx. 0 °C	mPa	0.252
Vapor Pressure	approx. 20 °C	mPa	0.490
Vapor Pressure	approx. 50 °C	mPa	1.135
Solubility at 25 °C	Water in Methyl chloride	% (m)	0.40
Solubility at 25 °C	Methyl chloride in water	% (m)	0.28
Explosion limit in air	lower at 1013 hPa	Vol. %	7.6
Explosion limit in air	upper at 1013 hPa	Vol. %	19.0
Ignition temperature	DIN 51 794	°C	625

Safety and transport information and toxicologic data are included in our actual material safety data sheet (MSDS). For further information and advice, please contact our technical service at [Customer-Service.Europe@vestolit.com](mailto:Customer-Service.Europe@vestolit.com) or our representatives.