

Vinyl chloride, also called chloroethene, is a chlorinated hydrocarbon.

It is mostly referred to as VCM (Vinyl Chloride Monomer) due to its primary use as a raw material for the production of polyvinylchloride. Under normal temperature and pressure conditions, VCM is a gas.

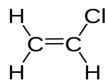
### **Key Properties**

 $\begin{array}{lll} \text{Chemical formula} & & \text{C}_2\text{H}_3\text{Cl} \\ \text{CAS number} & & 75\text{-}01\text{-}4 \\ \text{Molar mass} & & 62.5 \text{ g/mol} \\ \end{array}$ 

Density (liquid, at 20°C) 911 kg/m<sup>3</sup>

(liquid, at -20°C) 983 kg/m<sup>3</sup>

Melting point -154°C
Boiling point -13°C
Vapour pressure at -20 °C 78 kPa



## **Product Safety**

VCM is a highly flammable, toxic and carcinogenic product, requiring extensive handling precautions. For more details, please refer to our Material Safety Data Sheet which is available on request.

#### Production

At Vynova, VCM is produced by thermal cracking of ethylene dichloride (EDC) according to the following chemical reaction:

CICH<sub>2</sub>CH<sub>2</sub>CI → CH<sub>2</sub>=CHCI + HCI (EDC) (VCM) (Hydrochloric acid)

## **Applications**

VCM is almost exclusively used for the production of polyvinyl chloride (PVC).

# Quality

The table below shows the most important quality parameters of the Vynova VCM specification. A more detailed specification can be obtained on request.

Purity Min 99.98 % w/w	Ethyl Chloride  Max 50  mg/kg	Methyl Chloride  Max 80  mg/kg
Water Max 100 mg/kg	Acidity (as HCL)  Max 1  mg/kg	Iron (Fe)  Max 1 ppm w/w