

## Trifluoroethylene

CAS No. 359-11-5

Trifluoroethylene is a monomer that is used to manufacture various polymers and copolymers. It is a gas at ambient pressure and is sold as a gas under pressure. It is saturated with limonene vapor to inhibit polymerization.

### Proposed Specifications

Area by Gas Chromatography	97.0% minimum
(Excluding limonene and non-condensable gases such as N <sub>2</sub> and O <sub>2</sub> )	
Acidity (as HF)	1000 ppm w/w

### Physical Properties

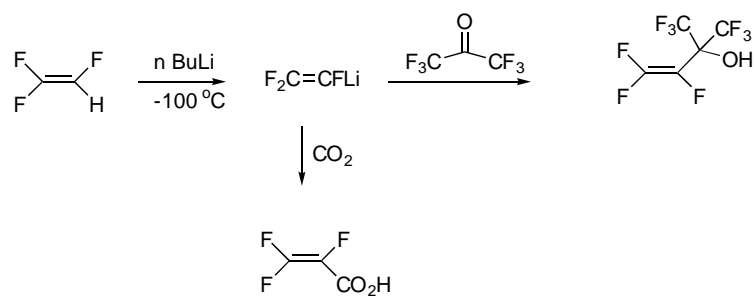
Chemical Formula:	CF <sub>2</sub> =CFH
Mol. Wt.:	82.06
Boiling Pt.:	-57 °C
Melting Pt.:	-78 °C
Vapor Pressure:	~ 300 psi at 20 °C
Density:	1.06 g/cm <sup>3</sup>
Appearance & Odor:	Colorless gas, the presence of limonene imparts a citrus odor.

### Packaging

Contact Customer Service

### Typical chemistry and uses

Trifluoroethylene is used to manufacture various polymers and copolymers. It has also shown some utility as a reagent in organic synthesis as demonstrated by the reactions shown below.



Reference: Drakesmith, F. G. *et al.* **J. Org. Chem.**; 33; 1968, 286.