

SEMI C3.43-90 (Withdrawn 0701) STANDARD FOR HYDROGEN FLUORIDE (HF), ANHYDROUS (PROVISIONAL)

This Standard was technically approved by the Gases Global Technical Committee. Available at www.semi.org in July 2001; originally published in 1990.

NOTICE: This Document was balloted and approved for withdrawal in 2001.

1 Description

1.1 Hydrogen fluoride is a highly toxic, irritating and corrosive gas with a sharp, pungent odor. It is colorless and nonflammable, but reacts violently with most organic materials.

2 Specifications

QUALITY: 99.94%

<i>Impurities</i>	<i>Maximum Acceptable Level (ppm)^{#1}</i>
Arsenic (As)	25
Hydrofluorosilicic	150
Nonvolatile Acidity (NVA H ₂ SO ₄)	50
Sulfur Dioxide (SO ₂)	100
Water (H ₂ O) (v/v)	200
TOTAL IMPURITIES	525

#1 An analysis of significant figures has not been considered. The number of significant figures will be based on analytical accuracy and the precision of the provided procedure.

3 Physical Constants (for information only)

	<i>Metric Units</i>	<i>US Units</i>
Molecular weight	20.01	20.01
Boiling point at 1 atm	19.5°C	67.1°F
Density of gas at 21.1°C (70°F) and 1 atm	0.83 kg/m ³	0.052 lb/ft ³
Specific gravity of gas	0.689	0.689
Critical Pressure	64.9 bar	941 psia
Critical Temperature	188°C	370.4°F
Density of liquid at Boiling Point	0.957 kg/L	



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