

GERMANE

A flammable, toxic, colorless gas used for the deposition of epitaxial and amorphous silicon - germanium alloys, and as a component for PECVD of (Si,Ge)O₂ films with controllable refractive index for photonic applications.

UHP GRADE - 99.998 vol. % min.
(excluding Ge₂H₆ and H₂)

GAS PHASE IMPURITY	MAXIMUM CONCENTRATION	GAS PHASE IMPURITY	MAXIMUM CONCENTRATION
CH ₄	1 ppmv	O ₂ + Ar	0.5 ppmv
H ₂ O	1 ppmv	H ₂	50 ppmv
N ₂	2 ppmv	Germoxanes	5 ppmv
CO ₂	2 ppmv	Chlorogermans	5 ppmv
Ge ₂ H ₆	20 ppmv	CO	1 ppmv
		Ge ₃ H ₈	1 ppmv

ORDERING INFORMATION

CYLINDER SIZE*	CONTENTS (grams)	GROSS WEIGHT (kgs)	CAS Number	7782-65-2
49	2,600	63	Pressure @ 21.1°C	~180 psig
30	1,500	24	Valve Outlet**	CGA-350 or 632
16	850	22	DOT Class (Label)	2.3 (Toxic Gas, Flammable Gas)
6	300	8	UN Number	2192
			DOT Shipping Name	Germane
			Toxic Inhalation Hazard	Zone B

* Other cylinder sizes are available - please inquire.

** DIN Outlet is also available

TECHNICAL INFORMATION

MAJOR HAZARDS	Toxic and flammable	MOLECULAR WEIGHT	76.62
FLAMMABLE LIMITS	LFL = 0.5% (est.), UFL = 100%	SPECIFIC VOLUME @ 21°C	0.316 l/g
EXPOSURE LIMIT	TLV-TWA = 0.2 ppm (see MSDS)	BOILING POINT @ 1atm	-88.4°C
ODOR	Pungent	CRITICAL TEMPERATURE	35°C
		CHEMICAL FORMULA	GeH ₄

SYNONYMS Germanium hydride, germanium tetrahydride, monogermane, germanomethane

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