

Germane. GeH₄

Product information

Germane is a germanium precursor for silicon germanium and pure germanium thin films.

Characteristics

Colorless compressed gas with pungent odor.

Physical data

Molecular weight	[g/mol]	76.62			
Boiling point	at 1.013 bar [°C]	-88.5	at 14.5 psi [°F]	-127.3	
Density	at 1.013 bar, 15 °C [kg/m³]	3.28	at 1 atm., 70 °F [lb/ft³]		
Vapor pressure	at 0 °C [bar]	26.5	at 32 °F [psi]	384.35	
	at 20 °C [bar]	45	at 70 °F [psi]	640	
Flammability range in a	air (% volume)	Pyrophoric			

Shipping information

UN number	CAS number	EC number	DOT label	Hazard labels required		
UN2192	7782-65-2	231-961-6	Toxic-Inhalation Hazard Zone B	ADR Class 2.3 DOT Class 2.3		

Product specification

Purity grade	Typical purity	Typical impurities [ppm]										
	(by weight)	N ₂	0 ₂ +Ar	CO ₂	H ₂	H ₂ 0	СО	THC	Ge ₂ H ₆	Ge ₃ H ₈	Germoxanes	Germanium Chlorides
5.0N	≥99.999 %	<u>≤2</u>	≤0.5	<u></u> ≤2	<u>≤</u> 50	<u></u> ≤1	<u></u> ≤1	<u>≤</u> 1	<u>≤</u> 20	<u>≤</u> 1	<u>≤</u> 5	≤5

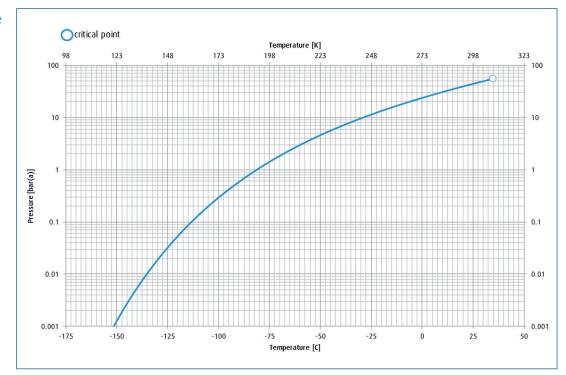
Packaging information

Package Cylinder Cylinder Cylinder Cylinder Cylinder Cylinder Pressure Valve Valve outlet (2) designation internal material diameter height to tare weight (psig) material options volume valve outlet @ 70° Cylinder 82 15.9L Aluminum 7.5 in 32 in 32 lb 1800 CGA632 SS (mixes only) Cylinder 32 5.9L Aluminum 6.8 in 15.6 in 15 lb 1800 CGA632 SS (mixes only) 42 kg Cylinder 40L 40L Aluminum 237 mm 1275 mm 2190 DIN1 SS Cylinder 29.5L 29.5L Aluminum 203.2 mm 49 mm 22.6 kg 1900 CGA632 SS

Please inquire about other package size availability

Vapor pressure curve

EU China



Additional information

The information, recommendations, and data contained in this publication are intended to give basic guidance for safe handling and use of gases. For more information, please refer to Safety Data Sheets. You can locate these through the <u>Linde Safety Data Sheet Search</u>. It is essential for the safe use of gases that personnel are properly trained and are fully aware of the possible hazards. Further information and advice on any matter relating to the safe handling or use of these products may be obtained from the nearest Linde office.

Please visit www.linde.com/electronics for Linde Electronics sales offices information.