

Germane (GeH₄)

VLSI Grade, Total Purity 99.999%*

Vapor Phase Impurities

Contaminants		Specifications (ppmv)
CO ₂	Carbon Dioxide	<2
CO	Carbon Monoxide	<1
Ge ₂ H ₆	Digermane	<20
N ₂	Nitrogen	<2
CH ₄	Methane	<1
O ₂ + Ar	Oxygen + Argon	<0.5
Ge ₃ H ₈	Trigermane	<1
H ₂ O	Water	<1
	Chlorogermanes	<5
	Germoxanes	<5
H ₂	Hydrogen	<50

*Total Purity Excludes Digermane and Hydrogen

Standard Package Information

Material Number	12127	12130
Cylinder Size	X29A	X6A
Fill Weight (grams)	1000	200
Valve Connection (CGA/DISS)	DISS 632 Manual	CGA 350
Cylinder Dimensions (in)	8 x 48	7 x 16

Recommended packaging for pure germane is aluminum cylinders.

Germane mixes are shipped in steel cylinders for low concentration germane mixes. Germane mixes of $\geq 10\%$ germane are shipped domestically in aluminum cylinders.

For Samples or More Information

If you would like additional information or technical assistance in preparing specific formulations, write or call Air Products and Chemicals, Inc. at the following locations.

Corporate Headquarters

Air Products and Chemicals, Inc.
7201 Hamilton Boulevard
Allentown, PA 18195-1501
Tel: (800) 654-4567
Fax: (800) 272-4449
www.airproducts.com/electronics

Eastern USA

Tel: (610) 481-2550
Fax: (610) 481-8210

Mid-America

Tel: (512) 892-7772
Fax: (512) 892-4337

Southwestern USA

Tel: (480) 968-4494
Fax: (480) 968-3396

Western USA

Tel: (408) 492-9080
Fax: (408) 492-9140

Canada

Tel: (905) 791-2530
Fax: (905) 791-6808

Eastern Air Products (China)

Tel: +(86) (21) 6360-8080
Fax: +(86) (21) 6360-9090

Europe/Mid-East

Tel: +(44) 1932-249959
Fax: +(44) 1932-811037

Japan (DAP)

Tel: +(81) (6) 6120-0912
Fax: +(81) (6) 6120-0919

Hong Kong

Tel: +(852) 2527-1922
Fax: +(852) 2527-1827

India

Tel.: +91 (0)22 2020345
Fax: +91 (0)22 2025588

Korea

Tel: +(82) (2) 2170-8045
Fax: +(82) (2) 733-0286

Malaysia

Tel: +(603) 7727-1836
Fax: +(603) 7726-1832

Singapore

Tel: +(65) 6332-2440
Fax: +(65) 6334-1005

Taiwan

Tel: +(886) (2) 2521-5891
Fax: +(886) (2) 2567-4704

Thailand

Tel: +(66) (2) 676-6262
Fax: +(66) (2) 676-6288

Schumacher

Tel: (760) 930-0273
Tel: (800) 545-9241
Fax: (760) 929-6262

tell me more
<http://www.airproducts.com/electronics>