PRODUCT DATA SHEET

Germanium Tetrachloride

Introduction

Germanium Tetrachloride is the primary precursor for the production of high-purity germanium dioxide (GeO_2) used in optical fiber preforms. It also serves as an important intermediate in the manufacturing of semiconductor-grade germanium metal, infrared optical materials, and other specialty electronic materials.

While optical fiber manufacturing remains its predominant application, demand has grown substantially in recent years, driven by the continued expansion of hyperscale AI datacenters, long-haul telecommunications infrastructure, and silicon photonics.

Synonyms	Germanium (IV) Chloride; $GeCl_4$
CAS Number	10038-98-9
EC Number	233-116-7
RTECS Number	LY5225000
Purity	>99.999%
Appearance/Form	Colorless fuming liquid
Formula Weight	214.45
Theoretical Germanium Content	33.873%
Specific Gravity	1.875 @ 20°C
Boiling Point	85°C
Vapor Pressure	76mm HG @ 20°C
Solubility	• Reacts with water, releasing toxic fumes • Soluble in ether, benzene, and chloroform • Insoluble in HCl and H_2SO_4

Packaging

1. Stainless steel container with Swagelok® valve manifold arrangement with manual operation.
2. Glass bottle with Teflon® manifold arrangement with manual operation packed in an overpack.
3. Other packaging and valve manifold options available on request.

Material is shipped in packaging compliant with the United Nations/Department of Transportation (UN/DOT), the International Air Transportation Association (IATA), and the International Maritime Dangerous Goods (IMDG) codes.

Storage and Shelf Life

Germanium Tetrachloride should be stored at room temperature in a tightly sealed container. When maintained under the recommended storage conditions, no specific shelf life is assigned to the product

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All of Indium Corporation's solder paste and preform manufacturing facilities are IATF 16949:2016 certified.
Indium Corporation is an ISO 9001:2015 registered company.

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