

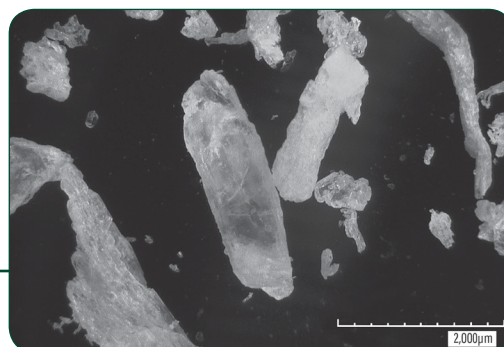
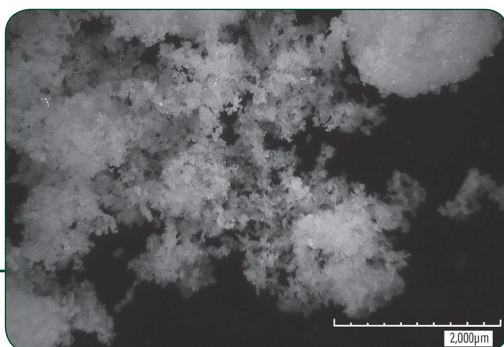
PRODUCT DATA SHEET

IndiTri™ (Indium Trichloride)



Introduction

IndiTri™ (indium trichloride) is a white, odorless, and highly deliquescent powder. Its particles are flake-shaped and highly soluble in water and mineral acids. It is used as a starting chemical for the synthesis of other inorganic and organic indium compounds and as an additive to alkaline batteries to reduce outgassing and improve operational efficiency of the battery when under electrical load. **IndiTri™** is available as an anhydrous powder and as a solution up to its solubility limit.



Properties

| | Standard, Type A | High Density, Type H |
|-------------------------------|--|---|
| Description | <p>IndiTri™ is a white, odorless, and highly deliquescent powder. Its particles are highly soluble in water and mineral acids. It is used as a starting chemical for the synthesis of other inorganic and organic indium compounds, and as an additive to alkaline batteries to reduce outgassing and improve operational efficiency of the battery when under electrical load. IndiTri™ is available as an anhydrous powder and as a solution up to its solubility limit.</p> | |
| Particle Shape/Appearance | Flake shaped | Irregular shaped particles with a glassy, lustrous appearance |
| Chemical Formula | InCl_3 | |
| Molecular Weight | 221.18 | |
| General Description | White deliquescent powder | White, glassy, deliquescent powder |
| Uses | Chemical synthesis; alkaline battery additive; precursor material for indium-metallorganic compounds such as TMI (tri-methyl-indium) | |
| Purity Grades Available | 4N (99.99%), 5N (99.999%) | |
| Solubility | 66.11g/100g of solution @ 22°C | |
| Specific Gravity | 3.46g/cc solid 1.97g/cc saturated solution | |
| Apparent Density | 0.25–0.4g/cc | 1.3–1.45g/cc |
| Melting Point | 586°C (sublimes at 300°C) | |
| Boiling Point | Volatilizes @ 600°C | |
| Isomorphous with | $\text{AlCl}_3, \text{YCl}_3$ | |
| Coordination Number | 6 | |
| Theoretical Indium Percentage | 51.91 | |
| Minimum Indium Percentage | 50.5 | 51.0 |
| Nominal Indium Percentage | 50.5–52.5 | 51.0–52.8 |

From One Engineer To Another®



PRODUCT DATA SHEET

IndiTri™ (Indium Trichloride) InCl_3

Standard Packaging Powder

| Quantity* | Container |
|-----------|-------------------|
| 1.8kg | 3.8-liter plastic |
| 0.5kg | 1-liter plastic |

Solution

1-liter polyethylene bottles
3.8-liter (1-gallon) polyethylene bottles
18.9-liter (5-gallon) polyethylene bottles

*All package sizes contain suitable desiccant. Packaging in other sizes or in glass may be available upon request.

Storage and Shelf Life

IndiTri™ is highly deliquescent and the solid crystals will liquefy quickly in humid environments. The container should contain a desiccant and the container kept tightly sealed. IndiTri™ has a shelf life of 12 months.

Technical Support

Indium Corporation sets the industry standard in providing rapid response, onsite technical support for our customers worldwide. Indium Corporation's team of Technical Support Engineers can provide expertise in all aspects of materials science.

Safety Data Sheets

The SDS for this product can be found online at <http://www.indium.com/sds>

This product data sheet is provided for general information only. It is not intended, and shall not be construed, to warrant or guarantee the performance of the products described which are sold subject exclusively to written warranties and limitations thereon included in product packaging and invoices. All Indium Corporation's products and solutions are designed to be commercially available unless specifically stated otherwise.

Contact our engineers: askus@indium.com

Learn more: www.indium.com



ASIA +65 6268 8678 • CHINA +86 (0) 512 628 34900 • EUROPE +44 (0) 1908 580400 • USA +1 315 853 4900



©2019 Indium Corporation