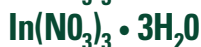


## PRODUCT DATA SHEET

## Indium Nitrate



## Introduction

**Indium Nitrate** is an odorless, off-white crystalline powder that is freely soluble in water and soluble in lower alcohols. It is available as an anhydrous powder and hydrated forms with 3 and 4.5 associated moles of water. The hydrated forms lose their associated water at temperatures over 100 °C. Continued heating at temperatures over 250 °C results in decomposition to indium oxide.

## Properties (Anhydrous)

Chemical Formula	$\text{In}(\text{NO}_3)_3$
Molecular Weight	300.85
General Description	Off-white hygroscopic powder
Uses	Chemical synthesis
Purity Grades Available	4N (99.99%), 5N (99.999%)
Solubility	Very soluble in water; soluble in alcohol
Theoretical Indium Percentage	38.17
Minimum Indium Percentage	36.4
Nominal Indium Percentage	40.0 +/- 3.6

## Properties (hydrated with 3 moles of water)

Chemical Formula	$\text{In}(\text{NO}_3)_3 \cdot 3\text{H}_2\text{O}$
Molecular Weight	354.91
General Description	Off-white hygroscopic powder
Uses	Chemical synthesis
Purity Grades Available	4N (99.99%), 5N (99.999%)
Solubility	Very soluble in water; soluble in alcohol
Theoretical Indium Percentage	32.35
Minimum Indium Percentage	28.8
Nominal Indium Percentage	32.4 +/- 3.6

## Properties (hydrated with 4.5 moles of water)

Chemical Formula	$\text{In}(\text{NO}_3)_3 \cdot 4.5\text{H}_2\text{O}$
Molecular Weight	381.94
General Description	Off-white hygroscopic powder
Uses	Chemical synthesis
Purity Grades Available	4N (99.99%), 5N (99.999%)
Solubility	Very soluble in water; soluble in alcohol
Theoretical Indium Percentage	30.06
Minimum Indium Percentage	26.4
Nominal Indium Percentage	30.1 +/- 3.6

Note:  $\text{In}(\text{NO}_3)_3 \cdot 4.5\text{H}_2\text{O}$  is unstable in that water separation often occurs depending on storage conditions, reverting to the more stable  $\text{In}(\text{NO}_3)_3 \cdot 3\text{H}_2\text{O}$  hydrated form.

## Standard Packaging

Quantity*	Container
3.5 kg	1-gallon Nalgene
2.0 kg	½-gallon Nalgene
1.0 kg	1-liter Nalgene
500 g	½-liter Nalgene
100–200 g	Plastic Jars

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

## Storage and Shelf Life

**Indium Nitrate** should be stored at room temperature and the container kept tightly sealed. **Indium Nitrate** has a shelf life of 6 months.

## 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.

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