

# **Technical Data Sheet (TDS)**

## **Diisobutylaluminum Hydride (DIBAL-H)**

Prepared by Tuoda Industry Limited

Lushang Phoenix Square, Jinan, Shandong & 250100 China

Tel: +86-531-88897198 | Email: [info@tuodaindus.com](mailto:info@tuodaindus.com)

Website: [www.tuodaindus.com](http://www.tuodaindus.com)

### Product Description

Diisobutylaluminum Hydride (DIBAL-H) is a highly reactive, colorless to pale yellow liquid widely used as a selective reducing agent in organic synthesis. It is also employed as a catalyst component in polymerization reactions. DIBAL-H reacts violently with water and air.

### Applications

- Selective reduction of esters to aldehydes in organic synthesis.
- Reducing agent in fine chemical production.
- Catalyst component in polymerization reactions.

### Chemical Information

<b>Chemical Name:</b>	Diisobutylaluminum Hydride
<b>Chemical Formula:</b>	C <sub>8</sub> H <sub>18</sub> AlH
<b>CAS No.:</b>	1191-15-7
<b>EINECS/ELINCS No.:</b>	214-738-0
<b>Molecular Weight:</b>	128.22 g/mol

### Specifications

<b>Appearance</b>	Colorless to pale yellow liquid
<b>Purity</b>	>= 95%
<b>Hydride Content</b>	approximately 7.5-8.5 wt%
<b>Density at 20°C</b>	0.79 g/cm <sup>3</sup>

### Typical Properties

<b>Melting Point</b>	< -80°C
<b>Boiling Point</b>	84-86°C (under reduced pressure)
<b>Flash Point</b>	-17°C
<b>Solubility</b>	Decomposes violently in water

### Packaging

Available in ASME-certified cylinders, stainless steel containers, or customized packaging solutions compliant with IMDG regulations.

### Storage and Handling

- Store under dry inert atmosphere (nitrogen or argon).
- Protect from air, moisture, and heat.
- Handle in a well-ventilated area equipped for flammable materials.

### Safety and Regulatory Information

- Classified as pyrophoric and water-reactive under GHS.
- Refer to MSDS for detailed safety procedures.
- Compliant with TSCA (US) and EINECS (EU) listings.

**Disclaimer**

This document is provided for informational purposes only. Tuoda Industry Limited does not guarantee the product's suitability for any particular application. Customers must verify compliance with local regulations.