

# **MATERIAL SAFETY DATA SHEET (SDS/MSDS)**

## **DI-BORON TRIOXIDE ANHYDROUS 98% EXTRA PURE**

CAS-No.: 1303-86-2

Product Code: 00465

Molecular Formula:  $B_2O_3$

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**DI-BORON TRIOXIDE ANHYDROUS 98% EXTRA**  
**PURE**

**CAS-No.: 1303-86-2**



**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product form : Substance  
Trade name : Di-boron Trioxide Anhydrous 98% Extra Pure  
EC-No. : 215-125-8  
CAS No : 1303-86-2

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**1.2.1. Relevant identified uses**

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet**

Company : Chemnovo Synthesis Pvt Ltd.  
N-226 Near Kumbhavali Naka  
Tarapur MIDC, Boisar-401 506  
Palghar, Maharashtra  
Telephone : +91 7400096089  
Email: export@chemnovo.in

**1.4. Emergency telephone number**

Emergency number : + 91 7400096089 (9:00am – 6:00 pm)

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Reproductive toxicity, H360FD  
Category 1A

Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Repr.Cat.2; R60

Repr.Cat.2; R61

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

**2.2. Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

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GHS08

Signal word (CLP)	:	Danger
Hazard statements (CLP)	:	H360FD - May damage fertility. May damage the unborn child.
Precautionary statements (CLP)	:	P201 - Obtain special instructions before use. P308+P313 - IF exposed or concerned: Get medical advice/attention.

**2.3. Other hazards**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

**SECTION 3: Composition/information on ingredients**

**3.1. Substance**

Name	:	Di-boron Trioxide Anhydrous 98% Extra Pure
CAS-No.	:	1303-86-2
EC-No.	:	215-125-8

Full text of R- and H-statements: see section 16

**3.2. Mixture**

Not applicable

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

First-aid measures general	:	IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	:	Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	:	Wash with plenty of water/....
First-aid measures after eye contact	:	Rinse immediately with plenty of water.
First-aid measures after ingestion	:	Rinse mouth. Do not induce vomiting.

**4.2. Most important symptoms and effects, both acute and delayed.**

Symptoms/effects	:	May damage the unborn child. May damage fertility.
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**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**



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Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.  
Unsuitable extinguishing media : Do not use a heavy water stream.

**5.2. Special hazards arising from the substance or mixture**

No additional information available

**5.3. Advice for firefighter**

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**6.1.1. For non-emergency personnel**

Emergency procedures : Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Ventilate area.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

**6.4. Reference to other sections**

No additional information available

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

**7.3. Specific end use(s)**

No additional information available

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

No additional information available

**8.2. Exposure controls**

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Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	[In case of inadequate ventilation] wear respiratory protection.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state	:	Solid
Molecular mass	:	69.62 g/mol
Colour	:	White crystalline.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	450 °C
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	2.404 g/cm <sup>3</sup>
Solubility	:	Water: Moderate (1-10%)
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No additional information available

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**10.4. Conditions to avoid**

Direct sunlight. Air contact. Moisture.

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

No additional information available

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	May damage fertility. May damage the unborn child.
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

**SECTION 12: Ecological information**

**12.1. Toxicity**

No additional information available

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

No additional information available

**12.4. Mobility in soil**

No additional information available

**12.5. Results of PBT and vPvB assessment**

<b>DI-BORON TRIOXIDE ANHYDROUS 98% EXTRA PURE (1303-86-2)</b>
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

**12.6. Other adverse effects**

No additional information available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**



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Product/Packaging disposal : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / AND

**14.1. UN number**

UN-No. (ADR)	:	Not applicable
UN-No. (IMDG)	:	Not applicable
UN-No.(IATA)	:	Not applicable
UN-No.(AND)	:	Not applicable
UN-No. (RID)	:	Not applicable

**14.2. UN proper shipping name**

Proper Shipping Name (ADR)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

**14.3. Transport hazard class(es)**

ADR

Transport hazard class(es) (ADR)	:	Not applicable
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IMDG

Transport hazard class(es) (IMDG)	:	Not applicable
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IATA

Transport hazard class(es) (IATA)	:	Not applicable
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AND

Transport hazard class(es) (ADN)	:	Not applicable
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RID

Transport hazard class(es) (RID)	:	Not applicable
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**14.4. Packing group**

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

**14.5. Environmental hazards**

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

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**14.6. Special precautions for user**

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

Diboron trioxide is on the REACH Candidate List

Di-boron Trioxide Anhydrous 98% Extra Pure is not on the REACH Annex XIV List

**15.1.2. National regulations**

**Germany**

Reference to AwSV : Water hazard class (WGK) 1, low hazard to water (Classification according to AwSV; ID No. 2613)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Netherlands**

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de : DI-BORON TRIOXIDE ANHYDROUS Extra Pure is listed

voortplanting giftige stoffen -

Vruchtbaarheid

NIET-limitatieve lijst van voor de : DI-BORON TRIOXIDE ANHYDROUS Extra Pure is listed

voortplanting giftige stoffen - Ontwikkeling

**Denmark**

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product



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The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

**15.2. Chemical safety assessment**

No additional information available

**SECTION 16: Other information**

Full text of H- and EUH-statements:

Repr. 1A	Reproductive toxicity, Category 1A
H360FD	May damage fertility. May damage the unborn child.
R60	May impair fertility
R61	May cause harm to the unborn child

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemnovo Synthesis Pvt Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.chemnovo.in](http://www.chemnovo.in) for additional terms and conditions of sale.

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