

**Product Name** 

Safety Data Sheet Revision Date: & Rules and Regulation Supersedes:

PRODUCT & COMPANY IDENTIFICATION

Product Name: BORIC ACID

Synonyms: BORACIC ACID

INCI Name: BORIC ACID
CAS Number: 10043-35-3
Formula: BH3O3

Product Form: SOLID

**Product Use:** No Information Available

Distributor: Address:

Dr TRC Lab Private Limited H-269,DSIIDC Industrial Area,

North West Delhi, Delhi-110039

Website: www.trckem.in

2 HAZARDS IDENTIFICATION

GHS Classification: Reproductive Toxicity Category 2

GHS Labelling: Warning
GHS Hazard Pictogram:

GHS Hazard Statements: H361 Suspected of damaging fertility or unborn child

GHS Precautionary P201 Obtain special instructions before use. P202 Do not handle until all

**Statement:** safety precautions have been read and understood. P280 Wear

protective gloves/ protective clothing/ eye protection/ face protection. P308+P313 IF exposed or concerned: Get medical advice/ attention.

P405 Store locked up. P501 Dispose of contents/ container in

accordance with national regulations.

**Potential Health Hazards:** Eye Contact:-Can cause irritation, redness, and tearing.

Ingestion:-Nausea, vomiting, diarrhea, and abdominal pain. Skin:-Mild irritation or redness with prolonged exposure.

Inhalation:-Irritation of the respiratory tract

NFPA Rating(704): No Information Available

3 COMPOSITION/INFORMATION ON INGREDIENTS

CompositionCAS No.Weight %Molecular WeightBoric Acid (H₃BO₃)10043-35-3≥99% (typically)61.83 g/mol

4 FIRST AID MEASURES

Eyes: Immediately flush eyes with **plenty of water** for at least **15 minutes**Inhalation: If breathing difficulties occur, provide **oxygen** if trained to do so.

Inhalation: If breathing difficulties occur, provide **oxygen** if trained to do so.

Skin: Remove contaminated clothing and rinse skin thoroughly.

**Do NOT induce vomiting** unless directed by medical personnel.



Suitable(and Unstable Extinguishing

Media:

Special protective equipment & Precaution for Fire-fighters:

Special Hazards arising from the

Chemicals:

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), or foam can

be used.

Protective Gear: Wear self-contained breathing apparatus

(SCBA) and full protective clothing if exposure to

decomposition fumes is possible.

**Decomposition Hazard**: At very high temperatures (>300°C / 572°F), boric acid decomposes into boron trioxide (B<sub>2</sub>O<sub>3</sub>), which

may react with water to form boric acid again.

### **ACCIDENTAL RELEASE MEASURES**

Personal precaution, protective equipment & emergency procedure:

**Environment precautions:** 

Methods and material for containment and cleaning up:

No action shall be taken without appropriate training or involving any personal risk. Follow precautions for safe

handling described in this safety data sheet.

Avoid the spillage or runoff entering drains, sewers or

watercourses

Avoid generation and spreading of dust. Avoid the spillage or

runoff entering drains, sewers or watercourses

#### **HANDLING & STORAGE**

Precautions for safe handling:

Handle all packages and containers carefully to minimise spills. Wear protective clothing as described in Section 8 of this safety data sheet.

Condition for safe storage, incl. any incompatibilities:

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from moisture.

No information available

#### **EXPOSURE CONTROLS / PERSONAL PROTECTION**

Component **Exposure Limit Basis Entity** N/A N/A N/A N/A

Personal Protection

Safety goggles or face shields to prevent eye contact with dust. Eyes:

Inhalation: Use local exhaust ventilation (LEV) or general ventilation to minimize

dust exposure.

Skin **Gloves** (e.g., nitrile or latex) recommended for prolonged handling.

Ingestion: Avoid ingestion by practicing proper hygiene

#### PHYSICAL AND CHEMICAL PROPERTIES

Appearance, Physical Solid Crystalline Vapour Pressure: Not available Density: Not available State: solid **Evaporation Rate:** Not available Odour: Odourless Flammability: The product is Color: White non-combustible

**Upper /lower Explosive** Molecular Weight: 61.83 g/mol

limit: pH(1% sol. In water): 6.1 (0.1% aq) Flash Point: No information available **Boiling Point:** Not available Specific Gravity: No information available Melting Point: > 1000°C Solubility: No information available



#### 10 STABILITY AND REACTIVITY

Reactivity: No test data specifically related to reactivity available for this product

or its ingredients

Chemical Stability: Stable at normal ambient temperatures and when used as

recommended.

Hazardous Polymerization: May be corrosive to metals.

Condition To Avoid: Avoid excessive heat for prolonged periods of time.

Incompatible Material: Avoid contact with the following materials: Strong reducing agents.

Inorganic hydrides. Alkali metals

Hazardous Decomposition Does not decompose when used and stored as recommended. Heating

Products: may generate the following products: Boric acid (meta HBO2), boric

oxide (B2O3)

#### 11 TOXICOLOGICAL INFORMATION

Acute Toxicity: LD50 (Lethal Dose, 50%)

Skin: May cause mild irritation but is not a strong irritant.

Eyes: Causes moderate eye irritation upon contact.

Respiratory: Not classified as a respiratory sensitizer.

Ingestion: Symptoms of ingestion may include nausea, vomiting, diarrhea,

abdominal pain, weakness, and dizziness.

Carcinogenicity: Not classified as carcinogenic by IARC, OSHA, or NTP.

Teratogenicity: Studies in animals suggest teratogenic effects at high doses.

Germ Cell Mutagenicity: Boric acid is not classified as a mutagen

Embryotoxicity: High-dose exposure in animal studies has shown reduced fetal

growth.

Specific Target Organ Toxicity: No Information Available

Reproductive Toxicity: Classified as Reproductive Toxicity Category 1B (GHS

Classification).

**Respiratory/Skin Sensitization:** Not classified as a respiratory sensitizer.

### 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or

frequent spills may have hazardous effects on the environment.

Aquatic Vertebrate: Lepomis macrochirus (Bluegill): 102 mg/L

Aquatic Invertebrate: Oncorhynchus mykiss (Rainbow trout): 79.7 mg/L
Terrestrial: High levels of boric acid in soil may be toxic to plants
Persistence and Degradability: Not applicable (boric acid is an inorganic compound).

Bioaccumulative Potential: Low

Mobility in Soil: Water Solubility: Highly soluble (49.2 g/L at 25°C)

PBT and vPvB Assessment: Other Adverse Effects:

#### 13 DISPOSAL CONSIDERATIONS

Water Residue: Waste is classified as hazardous waste. Do not puncture or incinerate, even

when empty. Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities

Product Containers: Dispose of waste to licensed waste disposal site in accordance with the

requirements of the local Waste Disposal Authority.



The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods.

#### 14 TRANSPORT INFORMATION

TDG(Transport Of Dangerous Goods, India): N/A
IMDG(International Maritime Dangerous Goods: N/A
IATA(International Air Transport Association): N/A
ICAO(International Civil Aviation Organization): N/A
DOP(Dept. Of Transport, India): N/A

#### 15 REGULATORY INFORMATION

No regulatory Information Available

#### 16 OTHER INFORMATION

Revision Date: March 2024

**Compliance:** This document has been prepared in accordance with the SDS requirements

**Disclaimer:** This information relates only to the specific material designated and may not be valid for

such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable

as of the date indicated.

However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own

particular use.