

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Boron, standard solution 1000mg/L

Product code(SDS NO): 69080jis_J_E1-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

Address: 1-6, Ohmano-Cho, Koshigaya, Saitama 343-0844, Japan

Division: Quality Assurance Department

Telephone number: +81-48-986-6161

FAX: +81-48-989-2787

e-mail address: shiyaku-t@junsei.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Reproductive toxicity: Category 1B

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Danger

HAZARD STATEMENT

May damage fertility or the unborn child

PRECAUTIONARY STATEMENT

Prevention

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Response

IF exposed or concerned: Get medical advice/attention.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

Ingredient name: Boric acid

Content(%): 0.57

Chemical formula: BH₃O₃

Chemicals No, Japan: 1-63

CAS No.: 10043-35-3

MW: 61.83

ECNO: 233-139-2

Boron, standard solution 1000mg/L,
JUNSEI CHEMICAL CO., LTD.,69080jis_J_E1-2,23/10/2017

Ingredient name:Water

Content(%):Residual quantity of the ingredient mentioned above.

Chemical formula:H₂O

CAS No.:7732-18-5

MW:18.02

ECNO:231-791-2

Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

General measures

IF exposed or concerned: Get medical attention/advice.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN(or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

The product is non-flammable.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Avoid release to the rivers, lakes, ocean and groundwater.

Boron, standard solution 1000mg/L,
JUNSEI CHEMICAL CO., LTD.,69080jis_J_E1-2,23/10/2017

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Protective measures against fire & explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Avoid breathing dust, fume, gas, mist or vapor.

Safety Measures/Incompatibility

Do not handle until all safety precautions have been read and understood.

Wear protective gloves, protective clothing or face protection.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

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

Keep cool. Protect from sunlight.

Store locked up.

8. Exposure controls/personal protection

Control parameters

No control value data available

Adopted value

(Boric acid)

No Adopted value data available

ACGIH(2004) TWA: 2mg/m³(I)

STEL: 6mg/m³(I) (URT irr)

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves. Recommended material(s): neoprene, nitrile, butyl rubber, viton, PVC, impermeable or chemical resistant rubber

Consult with your glove and/or personnel equipment manufacturer for selection of appropriate compatible materials.

Eye protection

Wear safety glasses with side-shields.

Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Liquid

Color: Colorless

Odor: None

pH: 5.0~6.0(20°C)

Phase change temperature

Initial Boiling Point/Boiling point data N.A.

Melting point/Freezing point data N.A.

Decomposition temperature data N.A.

Flash point data N.A.

Auto-ignition temperature data N.A.

Explosive properties data N.A.

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density data N.A.

Solubility

Solubility in water: Miscible

n-Octanol /water partition coefficient data N.A.

10. Stability and Reactivity

Chemical stability

Stable under normal storage/handling conditions.

Conditions to avoid

Contact with incompatible materials.

Heat.

Incompatible materials

Strong bases

Hazardous decomposition products

Boron oxides.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

(Boric acid) rat LD50=2660~5140 mg/kg (NITE risk assessment, 2008)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

(Boric acid) guinea pig/rabbit : mild to moderate (PATTY 6th, 2012)

Serious eye damage /irritation

[GHS Cat. Japan, base data]

(Boric acid) human : irritating (ACGIH 7th, 2005 et al.)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

Carcinogenicity

(Boric acid)

ACGIH-A4(2004) : Not Classifiable as a Human Carcinogen

Boron, standard solution 1000mg/L,
JUNSEI CHEMICAL CO., LTD.,69080jis_J_E1-2,23/10/2017

Reproductive toxicity

[GHS Cat. Japan, base data]

(Boric acid) cat.1B; NTP DB, Access on Aug. 2013

No Teratogenic effects data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT

STOT-single exposure

[cat.3(resp. irrit.)]

[Japan published data]

(Boric acid) Respiratory tract irritation (ECETOC TR 63, 1995)

No Aspiration hazard data available

Additional data

There are no data available on the preparation itself.

12. Ecological Information

Toxicity

Aquatic toxicity

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

(Boric acid)

Algae (Pseudokirchneriella subcapitata) ErC50=290 mg/L/72hr

(Results of Eco-toxicity tests of chemicals conducted by MOE in Japan, 2008)

Aquatic chronic toxicity component(s) data

[GHS Cat. Japan, base data]

(Boric acid)

Fish (rainbow trout) NOEC=2.1 mg/L/87days

(Results of Eco-toxicity tests of chemicals conducted by MOE in Japan, 2008)

Water solubility

(Boric acid) 5.6 g/100 ml (20°C)(ICSC, 2014)

No Persistence and degradability data available

Bioaccumulative potential

(Boric acid) log Pow=-1.09 (ICSC, 2014)

Additional information

There are no data available on the preparation itself.

13. Disposal considerations

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

Not applicable to UN NO.

15. Regulatory Information

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

US major regulations

TSCA

Water; Boric acid

Other regulatory information

We are not able to check up the regulatory information in regard to the substances in your

Boron, standard solution 1000mg/L,
JUNSEI CHEMICAL CO., LTD.,69080jis_J_E1-2,23/10/2017

country or region, therefore, we request this matter would be filled by your responsibility.
Regulatory information with regard to this substance in your country or in your region
should be examined by your own responsibility.
Ensure this material in compliance with federal requirements and ensure conformity to local
regulations.

16. Other information

GHS classification and labelling

Repr. 1B: H360 May damage fertility or the unborn child

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)
2017 TLVs and BEIs. (ACGIH)
<http://monographs.iarc.fr/ENG/Classification/index.php>
Supplier's data/information
NITE Chemical Risk Information Platform(NITE-CHRIP) <http://www.safe.nite.go.jp/japan/db.html>
GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013,METI)

General Disclaimer

This information contained in this data sheet represents the best information currently
available to us. However, no warranty is made with respect to its completeness and we
assume no liability resulting from its use. It are advised to make their own tests to
determinate the safety and suitability of each such product or combination for their own
purposes.

The data given here is based on current knowledge and experience. The purpose of this
Safety Data Sheet is to describe the products in terms of their safety requirements. The
data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in
2015).