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Safety Data Sheets

1. Identification

Product name : Sodium tetraborate anhydrous

Name of supplier : JUNSEI CHEMICAL CO., LTD.

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Division : Quality Assurance Department

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Product code (SDS NO) : 35365jis_E1-1

2. Hazards identification

GHS classification and label elements of the product

GHS classification

HEALTH HAZARDS

Reproductive toxicity : Category 1B

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



Signal word : Danger

HAZARD STATEMENT

May damage fertility or the unborn child

PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

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

Substance/Preparation : Substance

Common name, synonyms : Glass borates

Ingredient name: Sodium tetraborate anhydrous

content(%): 98.0<

Chemical formula: $B_4Na_2O_7$

Chemicals No, Japan: 1-69

CAS No.: 1330-43-4

MW: 201.22

ECNO: 215-540-4

4. First-aid measures

General procedures

IF exposed or concerned: Get medical attention/advice.

IF INHALED

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

IF ON SKIN (or hair)

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

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

The product is non-flammable.

Specific hazards arising from the chemical

Containers may explode when heated.

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

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear cold insulating gloves/face shield/eye 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, groundwater.

Methods and materials for neutralization, containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Use personal protective equipment as required.

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, vapor, mist, or gas.

Safety Measures/Incompatibility

Obtain special instructions before use.

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

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep container tightly closed.

Keep cool . Protect from sunlight.

Store in well-ventilated place.

Store locked up.

8. Exposure controls/personal protection

Control parameters e.g. occupational exposure limit values or biological limit values

Adopted value

ACGIH(2004) TWA: 2mg/m³ (As borate)

STEL: 6mg/m³ (As borate) (URT irr)

NIOSH-REL

TWA 1mg/m³

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Protective equipment

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA).

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties

Physical properties

Appearance :POWDER OR GLASS-LIKE PLATE

Color :WHITE(POWDER) OR GLASS-LIKE PLATE.. TURNS OPAQUE ON EXPOSURE TO AIR

Odor :ODOURLESS

pH :9.3 (3% solution, 20°C)

Phase change temperature

Initial Boiling Point/Boiling point :1575°C

Melting point/Freezing point :741°C

Decomposition temperature :1575

Flash point data N.A

Auto-ignition temperature data N.A

Vapor pressure data N.A

Vapor density data N.A

Specific gravity/Density :2.367

Solubility

Solubility in water :2.56 g/100 ml (20°C)

n-Octanol /water partition coefficient data N.A

10. Stability and Reactivity

Stability

Stable under normal storage/handling conditions.

Hygroscopic.

Possibility of hazardous reactions

Reacts with strong oxidants.

Conditions to avoid

Contact with incompatible materials.

Open flames. Heat.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Sodium oxide.

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

No Irritant properties data available

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Teratogenic effects data available

Carcinogenic effects

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

Toxicity for reproduction

NTP DB(Boric acid)

No Aspiration hazard data available

12. Ecological Information

Ecotoxicity

No Aquatic toxicity data available

No Persistence and degradability data available

No Bioaccumulative potential data available

13. Disposal Considerations

Disposal 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

GHS classification and labelling

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

US major regulations

TSCA

Sodium tetraborate anhydrous

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 17th edit. UN

Classification, labelling and packaging of substances and mixtures (reg.(EC) No 1272/2008)

2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)

2013 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/monoeval/grlist.html>

Supplier's data/information

Chemical Risk Information Platform (CHRIP)(NITE) <http://www.safe.nite.go.jp/japan/db.html>

GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013, METI)

Other information

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 test

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, EU official data