

Revision date: 05-09-2014

SAFETY DATA SHEET

1. Identification

Product identifier: Sodium Borate

Other means of identification

Product No.: 7792, 7460, 7457, 7418, 3575, 3574, 3570, 3568

Recommended use and restriction on use

Recommended use: Not available. Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name: Avantor Performance Materials, Inc. Address: 3477 Corporate Parkway, Suite 200

Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

Fax:

Contact Person: Environmental Health & Safety e-mail: info@avantormaterials.com

Emergency telephone number:

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard classification

Health hazards

Serious eye damage/eye irritation Category 2A
Toxic to reproduction Category 1B

Label elements

Hazard symbol:



Signal word: Danger

Hazard statement: Causes serious eye irritation.

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. Wear protective

gloves/protective clothing/eye protection/face protection. Wash hands

thoroughly after handling.



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Response: IF exposed or concerned: 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 eve irritation persists: Get medical

advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Mixtures

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
BORATES, TETRA, SODIUM SALTS DECAHYDRATE		1303-96-4	99 - 100%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

Ingestion: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel

unwell.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin contact: Wash skin thoroughly with soap and water. Get medical attention if

symptoms occur.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention if symptoms persist.

Most important symptoms/effects, acute and delayed

Symptoms: Causes serious eye irritation.

Indication of immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

General fire hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.



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Unsuitable extinguishing

media:

None known.

Specific hazards arising from

the chemical:

None known.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Keep unauthorized personnel away. Ventilate closed spaces before entering them. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment.

Methods and material for containment and cleaning

Sweep up and place in a clearly labeled container for chemical waste.

Clean surface thoroughly to remove residual contamination.

Notification Procedures: Inform authorities if large amounts are involved.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground. Do not

contaminate water sources or sewer. Prevent further leakage or spillage if

safe to do so.

7. Handling and storage

Precautions for safe handling:

Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Do not eat, drink or smoke when using the product. Wash thoroughly after handling. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities:

Keep containers tightly closed. Store in cool, dry place. Store in a wellventilated place.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Chemical identity	Туре	Exposure Limit values	Source
BORATES, TETRA, SODIUM SALTS DECAHYDRATE - Inhalable fraction.	STEL	6 mg/m3	US. ACGIH Threshold Limit Values (02 2012)
	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (02 2012)
BORATES, TETRA, SODIUM SALTS DECAHYDRATE	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate engineering controls

No data available.



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Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the

immediate work area.

Eye/face protection: Wear safety glasses with side shields (or goggles). Use tight fitting goggles

if dust is generated.

Skin protection

Hand protection: Wear protective gloves.

Other: Wear suitable protective clothing.

Respiratory protection: In case of inadequate ventilation use suitable respirator. Air-purifying

respirator with a high efficiency particulate filter.

Hygiene measures: Provide eyewash station and safety shower. Always observe good personal

hygiene measures, such as washing after handling the material and before

eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state: Solid

Form: Crystals or powder.

Color: White Odor: Odorless

Odor threshold:

pH:

No data available.

No data available.

Melting point/freezing point: 75 °C

Initial boiling point and boiling range: 320 °C (loses water of hydration)

Flash Point:

Evaporation rate:

Flammability (solid, gas):

Not applicable

No data available.

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

Solubility(ies)

Solubility in water: 60 g/l

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

No data available.

No data available.

No data available.

Viscosity:

No data available.



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Other information

Molecular weight: 381.37 g/mol

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

Conditions to avoid: Contact with incompatible materials.

Incompatible materials: Acids.

Hazardous decomposition

products:

By heating and fire, toxic vapors/gases may be formed.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be harmful if swallowed. May cause irritation of the gastrointestinal

tract.

Inhalation: May cause irritation to the mucous membranes and upper respiratory tract.

Skin contact: May cause irritation. Prolonged or repeated contact with skin may cause

redness, itching, irritation and eczema/chapping.

Eye contact: Causes serious eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat): 2,660 mg/kg

Dermal

Product:

No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin corrosion/irritation

Product: May cause skin irritation.

Serious eye damage/eye irritation

Product: Causes serious eye irritation.

Respiratory or skin sensitization

Product: Not a skin sensitizer.

Carcinogenicity

Product: This substance has no evidence of carcinogenic properties.



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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro

Product: No mutagenic components identified

In vivo

Product: No mutagenic components identified

Reproductive toxicity

Product: May damage fertility or the unborn child.

Specific target organ toxicity - single exposure
Product:

None known.

Specific target organ toxicity - repeated exposure

Product: None known.

Aspiration hazard

Product: Not classified

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and degradability

Biodegradation

Product: There are no data on the degradability of this product.

BOD/COD ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)



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No data available on bioaccumulation. **Product:** Partition coefficient n-octanol / water (log Kow) **Product:** No data available. Mobility in soil: The product is partly soluble in water. May spread in the aquatic environment. Other adverse effects: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. 13. Disposal considerations **Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws. Contaminated packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied. 14. Transport information DOT Not regulated. **IMDG** Not regulated. IATA Not regulated. 15. Regulatory information US federal regulations TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) None present or none present in regulated quantities. CERCLA Hazardous Substance List (40 CFR 302.4): None present or none present in regulated quantities. Superfund amendments and reauthorization act of 1986 (SARA) **Hazard categories** Chronic (Delayed) Fire Acute (Immediate) Reactive Pressure Generating SARA 302 Extremely hazardous substance None present or none present in regulated quantities. SARA 304 Emergency release notification None present or none present in regulated quantities.



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SARA 311/312 Hazardous chemical

Chemical identity Threshold Planning Quantity

BORATES, TETRA, SODIUM SALTS--DECAHYDRATE 500 lbs

SARA 313 (TRI reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US state regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

BORATES, TETRA, SODIUM Listed SALTS--DECAHYDRATE

US. Massachusetts RTK - Substance List

BORATES, TETRA, Listed SODIUM SALTS-- DECAHYDRATE

US. Pennsylvania RTK - Hazardous Substances

BORATES, TETRA, Listed SODIUM SALTS-- DECAHYDRATE

US. Rhode Island RTK

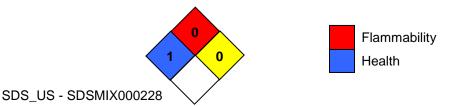
No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:

Australia AICS: On or in compliance with the inventory Canada DSL Inventory List: On or in compliance with the inventory **EU EINECS List:** On or in compliance with the inventory Japan (ENCS) List: On or in compliance with the inventory Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Philippines PICCS: On or in compliance with the inventory US TSCA Inventory: On or in compliance with the inventory China Inv. Existing Chemical Substances: On or in compliance with the inventory Canada NDSL Inventory: Not in compliance with the inventory. On or in compliance with the inventory New Zealand Inventory of Chemicals: On or in compliance with the inventory Japan ISHL Listing: Japan Pharmacopoeia Listing: Not in compliance with the inventory.

16.Other information, including date of preparation or last revision

NFPA Hazard ID





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Reactivity
Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 05-09-2014

Revision date: No data available.

Version #: 1.0

Further information: No data available.

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