

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

Avantor Performance Materials, Inc.
3477 Corporate Parkway, Suite 200
Center Valley, PA 18034
-
Customer Service: 855-282-6867
Environmental Health & Safety 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

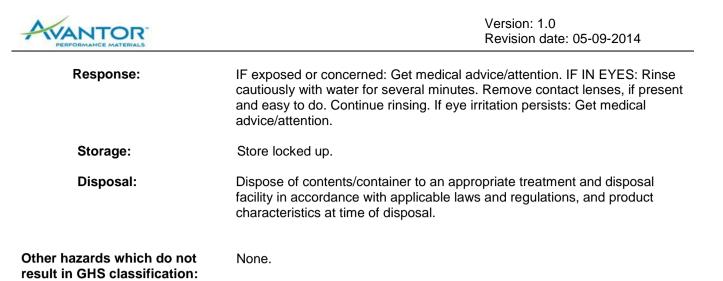
Hazard statement:

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.



3. Composition/information on ingredients

Mixtures

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

* 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		
Treatment:	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.	



Unsuitable extinguishing media:	None known.
Specific hazards arising from the chemical:	None known.
Special protective equipment an	d 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 measure	s
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 up:	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 well- ventilated 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.



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:	No data available.
pH:	No data available.
Melting point/freezing point:	75 °C
Initial boiling point and boiling range:	320 °C (loses water of hydration)
Flash Point:	Not applicable
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosi	ve limits
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	1.73 (20 °C)
Solubility(ies)	
Solubility in water:	60 g/l
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.



Other information Molecular weight:

381.37 g/mol

10.	Stability	and	reactivity
10.	Otability	ana	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 e Ingestion:	exposure 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 effe	ects
Acute toxicity (list all possible	e 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 irritati Product:	on Causes serious eye irritation.
Respiratory or skin sensitizatio Product:	n Not a skin sensitizer.
Carcinogenicity Product:	This substance has no evidence of carcinogenic properties.



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 - s Product:	ingle exposure None known.
Specific target organ toxicity - re Product:	epeated exposure 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)	

SDS_US - SDSMIX000228



Product:	No data available on bioaccumulation.	
Partition coefficient n-octa Product:	nol / water (log Kow) 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.

ΙΑΤΑ

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
X Acute (Immediate) X Chronic (Delayed) Fire 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.



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

Listed

BORATES, TETRA, SODIUM L SALTS--DECAHYDRATE

US. Massachusetts RTK - Substance List

BORATES, TETRA, SODIUM SALTS--DECAHYDRATE

US. Pennsylvania RTK - Hazardous Substances

BORATES, TETRA, SODIUM SALTS--DECAHYDRATE

US. Rhode Island RTK

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

Listed

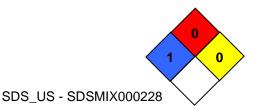
Inventory Status:

Canada DSL Inventory List: EU EINECS List: Japan (ENCS) List: Korea Existing Chemicals Inv. (KECI): Philippines PICCS: US TSCA Inventory: China Inv. Existing Chemical Substances: Canada NDSL Inventory: New Zealand Inventory of Chemicals: Japan ISHL Listing: Japan Pharmacopoeia Listing:	Australia AICS:
Japan (ENCS) List: Korea Existing Chemicals Inv. (KECI): Philippines PICCS: US TSCA Inventory: China Inv. Existing Chemical Substances: Canada NDSL Inventory: New Zealand Inventory of Chemicals: Japan ISHL Listing:	Canada DSL Inventory List:
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New Zealand Inventory of Chemicals: Japan ISHL Listing:	China Inv. Existing Chemical Substances:
Japan ISHL Listing:	Canada NDSL Inventory:
	New Zealand Inventory of Chemicals:
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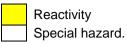
16.Other information, including date of preparation or last revision

NFPA Hazard ID









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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