

Revision number: 2 Revision date: 10/06/2014

# 1. IDENTIFICATION

Product name: Product code: 4-(Methylamino)phenol Sulfate M0145

Not for drug or household use.

For laboratory research purposes.

**TCI AMERICA** 

SAFETY DATA SHEET

#### Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

## 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Acute Toxicity - Oral [Category 4] Sensitization - Skin [Category 1] Aquatic Hazard (Acute) [Category 1] Aquatic Hazard (Long-Term) [Category 1]

Signal word:

Warning!

Hazard Statement(s):

Harmful if swallowed May cause an allergic skin reaction Very toxic to aquatic life Very toxic to aquatic life with long lasting effects

#### Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] breathing dusts or mists. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. None Dispose of contents and container in accordance with US EPA guidelines for the classification and

Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Avoid

determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components: Substance 4-(Methylamino)phenol Sulfate

#### Emergency telephone number:

Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) **Responsible department:** TCI America Environmental Health Safety and Security +1-503-286-7624 **TCI AMERICA** 

3. COMPOSITION/INFORMA	TION ON INGREDIENTS	
Percent:	>98.0%(HPLC)(N)	
CAS Number:	55-55-0	
Molecular Weight:	344.38	
Chemical Formula:	$C_{14}H_{18}N_2O_2 \cdot H_2SO_4$	

# 4. FIRST-AID MEASURES

Inhalation:	May cause coughing, difficult breathing and nausea. Call emergency medical service. Effects of exposure (inhalation) to substance may be delayed. Inhalation of vapors or contact with substance will result in contamination and potential harmful effects. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Skin contact:	Call a poison center or doctor if you feel unwell. Effects of exposure (skin contact) to substance may be delayed. Remove and wash contaminated clothing before re-use. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Eye contact:	If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper eyelids. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Ingestion:	Harmful if swallowed. Effects of exposure (ingestion) to substance may be delayed. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Symptoms/effects:	
Acute: Delayed:	No data available May cause skin sensitization.
Immediate medical attention:	WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. CAUTION: Victim may be a source of contamination. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, CO <sub>2</sub> , water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the chemic Hazardous combustion products: Other specific hazards:	al These products include: Carbon oxides Nitrogen oxides Silicates Closed containers may explode from heat of a fire.
heated. Move containers from fire area if you Special protective equipment for fire-figh Wear positive pressure self-contained breat	

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Personal protective equipment:	Safety glasses. Wear protective clothing (chemical resistant suit and chemical resistant boots). Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

#### 6. ACCIDENTAL RELEASE MEASURES Emergency procedures: Provide Action Procedures Procedure

Prevent dust cloud. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

#### Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. Dike far ahead of spill; use dry sand to contain the flow of material. Ventilate the area.

Environmental precautions:

Keep away from living quarters. Environmental hazard. Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE	
Precautions for safe handling:	Avoid inhalation of vapor or mist. Do not ingest. Avoid contact with skin and eyes. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.
Conditions for safe storage:	Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.
Storage incompatibilities:	Store away from oxidizing agents

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No data available

#### Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

#### Personal protective equipment

Respiratory protection:	Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection:	Wear protective gloves.
Eye protection:	Safety glasses.
Skin and body protection:	Lab coat.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Powder White - Deep green No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	260°C (dec.) (500°F) No data available No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log P <sub>ow</sub> )	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	No data available No data available	Autoignition tempe Flammability or exp Lower: Upper:	

Solubility(ies):

Water: Soluble (4.7g/100mL, 15°C) Slightly soluble: Alcohols Insoluble: Ether **TCI AMERICA** 

# 10. STABILITY AND REACTIVITY

Reactivity:
Chemical Stability:
Possibility of Hazardous Reactions:
Conditions to avoid:
Incompatible materials:
Hazardous Decomposition Products:

Not Available. Moisture sensitive. Light sensitive. No hazardous reactivity has been reported. Exposure to light. Exposure to moisture. Moisture sensitive. Oxidizing agents No data available

# 11. TOXICOLOGICAL INFORMATION

RTECS Number: SL8650000 Acute Toxicity: orl-mus LD50:565 mg/kg ipr-rat LDLo:50 mg/kg orl-rat LDLo:200 mg/kg skn-gpg LD50:>1 g/kg Skin corrosion/irritation: skn-hmn 1 %/48H Serious eye damage/irritation: No data available Respiratory or skin sensitization: No data available Germ cell mutagenicity: mmo-sat 167 ug/plate (-S9) Carcinogenicity: No data available IARC: No data available NTP: No data available OSHA: No data available **Reproductive toxicity:** No data available

Routes of Exposure: Symptoms related to exposure:

Overexposure may result in serious illness or death. Skin contact may result in sensitization. Readily absorbed through skin. Potential Health Effects:

Inhalation, Eye contact, Ingestion, Skin contact.

No specific information available; skin and eye contact may result in irriatation. May be harmful if inhaled or ingested. **Target organ(s):** No data available

## 12. ECOLOGICAL INFORMATION

Ecotoxicity Fish: Crustacea: Algae:	No data available No data available No data available
Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient:	No data available No data available No data available No data available
n-octanol/water (log P <sub>ow</sub> ) Soil adsorption (Koc): Henry's Law: constant (PaM <sup>3</sup> /mol)	No data available No data available

Non-hazardous for transportation.

13. DISPOSAL CONSIDERAT	TONS	
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.	
Disposal of container:	Dispose of as unused product. Do not re-use empty containers.	
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.	
14. TRANSPORT INFORMAT	ION	
DOT (US)	Non-hazardous for transportation.	
ΙΑΤΑ	Non-hazardous for transportation.	

## 15. REGULATORY INFORMATION

IMDG

**Toxic Substance Control Act (TSCA 8b.):** This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations	
CERCLA Hazardous substance and I	Reportable Quantity:
SARA 313:	Not Listed
SARA 302:	Not Listed
State Regulations	
State Right-to-Know	
Massachusetts	Not Listed

maccaemacotto	
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

#### **Other Information**

Health:	2
Flammability:	0
Physical:	0

200-237-1

# International Inventories

WHMIS hazard class:

#### EC-No:

# 16. OTHER INFORMATION

#### Revision date: 10/06/2014

**Revision number: 2** 

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.

D2A: Materials causing other toxic effects. (Very Toxic) D2B: Materials causing other toxic effects. (Toxic)



# Material Safety Data Sheet Revision Date 20-Jan-2010

Creation Date 20-Jan-2010

**Revision Number** 1

**1. PRODUCT AND COMPANY IDENTIFICATION** 

Product Name Sodium sulfite anhydrous		
Cat No.	BP355-500; S430-3; S430-10; S430-500; S447-3; S447-500	
Synonyms	Disodium sulfite; Sulfurous acid, disodium salt (Crystalline/Powder/Certified ACS/Low Phosphate)	
Recommended Use	Laboratory chemicals	
<b>Company</b> Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100	Emergency Telephone Number CHEMTREC®, Inside the USA: 800- 424-9300 CHEMTREC®, Outside the USA: 703- 527-3887	

# 2. HAZARDS IDENTIFICATION

WARNING!			
Contact with acids liberates to	<b>Emergency Overview</b> oxic gas. May cause eye, skin, and respiratory tract irritation . Ma system effects.	y cause central nervous	
Appearance Off-white	Physical State Solid	odor odorless	
Target Organs	Central nervous system (CNS)		
Potential Health Effects			
Acute Effects Principle Routes of Exposure			
Eyes Skin Inhalation Ingestion	May cause irritation. May cause irritation. May be harmful in contact with skin. May cause irritation of respiratory tract. May be harmful if inhaled. May be harmful if swallowed. May cause central nervous system e gastrointestinal irritation, nausea, vomiting and diarrhea.	ffects. Ingestion may cause	
Chronic Effects	Chronic Effects Mutagenic effects have occurred in experimental animals.		
See Section 11 for additional Toxic	cological information.		

## **Aggravated Medical Conditions**

No information available.

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Compone	ent	CAS-No	Weight %	
Sodium su	lfite	7757-83-7	97	
	4. FIRST A			
Eye Contact	Rinse immediately with medical attention.	plenty of water, also under the	e eyelids, for at least 15 minutes. Obtain	
Skin Contact		Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.		
Inhalation	Move to fresh air. If bre symptoms occur.	to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if oms occur.		
Ingestion	Do not induce vomiting.	Obtain medical attention.		
Notes to Physician	Treat symptomatically.			

# 5. FIRE-FIGHTING MEASURES

Flash Point Method	No information available. No information available.
Autoignition Temperature Explosion Limits	No information available.
Upper	No data available
Lower	No data available
Suitable Extinguishing Media	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire
Unsuitable Extinguishing Media	No information available.
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact Sensitivity to static discharge	No information available. No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

## **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

NFPA

Health 1

Flammability 0

Instability 1

Physical hazards N/A

# 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.
<b>Environmental Precautions</b>	Should not be released into the environment.
Methods for Containment and Clean Up	Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal.

# 7. HANDLING AND STORAGE

Handling	Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothing. Keep away from acids.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near acids.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
NIOSH IDLH: Immediately Dangerous to Life or Health	
Personal Protective Equipment	
Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Appearance odor Odor Threshold pH Vapor Pressure Vapor Density Viscosity Boiling Point/Range Melting Point/Range Decomposition temperature °C	Solid Off-white odorless No information available. 8.5-10 5% aq.sol. No information available. No information available. No information available. No information available. >500°C / 932°F
Melting Point/Range	>500°C / 932°F
Flash Point Evaporation Rate	No information available. No information available.
Specific Gravity Solubility log Pow	2.630 Partly soluble in water No data available

9. PHYSICAL AND CHEMICAL PROPERTIES		
Molecular Weight Molecular Formula	126.04 Na2SO3	
10. STABILIT	Y AND REACTIVITY	
Stability	Air sensitive. Moisture sensitive.	
Conditions to Avoid	Incompatible products. Excess heat. Exposure to air. Exposure to moisture.	
Incompatible Materials	Strong oxidizing agents, Acids	
Hazardous Decomposition Products	Sulfur oxides, Sodium oxides	
Hazardous Polymerization	Hazardous polymerization does not occur	
Hazardous Reactions .	Contact with acids liberates toxic gas.	
11. TOXICOLOGICAL INFORMATION		

# Acute Toxicity

# **Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium sulfite	820 mg/kg (Rat)	Not listed	22 mg/L (Rat)1 h
			5.5 mg/L(Rat)4 h

Irritation Toxicologically Synergistic Products	No information available. No information available.
<u>Chronic Toxicity</u> Carcinogenicity	There are no known carcinogenic chemicals in this product
Sensitization	No information available.
Mutagenic Effects	Mutagenic effects have occurred in experimental animals.
Reproductive Effects	No information available.
Developmental Effects	No information available.
Teratogenicity	No information available.
Other Adverse Effects	See actual entry in RTECS for complete information.

**Endocrine Disruptor Information** 

No information available

# **12. ECOLOGICAL INFORMATION**

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium sulfite	Not listed	Not listed	EC50 = 770 mg/L 17 h	LC50 24 h 330 mg/L
Persistence and Degradability No information available		on available		
Bioaccumulation/ Accum	ulation No information	on available		
Mobility				
	Component		log Pow	
	Sodium sulfite		-4	
	13. DIS	POSAL CONSIDER	RATIONS	
		ANSPORT INFORM	complete and accurate class	fication
DOT	Not regulate	ed		
TDG	Not regulate	ed		
IATA	Not regulate	ed		
IMDG/IMO	Not regulate	ed		

# **15. REGULATORY INFORMATION**

# International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Sodium sulfite	Х	Х	-	231-821- 4	-		Х	Х	Х	Х	KE- 31612 X

Legend: X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

#### **U.S. Federal Regulations**

TSCA 12(b) Not applicable

# **SARA 313**

Not applicable

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act** Not applicable

## **Clean Air Act** Not applicable

**OSHA** Not applicable

CERCLA Not Applicable

## **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### State Right-to-Know Not applicable

# **U.S. Department of Transportation**

Reportable Quantity (RQ):	Ν
DOT Marine Pollutant	Ν
DOT Severe Marine Pollutant	Ν

## **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

# **Other International Regulations**

## Mexico - Grade

No information available

## Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class Non-controlled

# **16. OTHER INFORMATION**

Prepared By	Regulatory Affairs Thermo Fisher Scientific Tel: (412) 490-8929
Creation Date	20-Jan-2010
Print Date	20-Jan-2010
Revision Summary	"***", and red text indicates revision

### Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS

# SIGMA-ALDRICH

sigma-aldrich.com

# **SAFETY DATA SHEET**

Version 4.7 Revision Date 04/24/2015 Print Date 05/28/2016

# **1. PRODUCT AND COMPANY IDENTIFICATION**

1.1	Product identifiers Product name	:	Sodium metaborate tetrahydrate
	Product Number Brand	:	S0251 Aldrich
	CAS-No.	:	10555-76-7
1.2	Relevant identified uses o	f th	e substance or mixture and uses advised against
	Identified uses	:	Laboratory chemicals, Manufacture of substances
1.3	Details of the supplier of t	he	safety data sheet
	Company	:	Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA
	Telephone Fax	:	+1 800-325-5832 +1 800-325-5052
14	Emergency telephone nur	nhe	r

#### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

# 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Eye irritation (Category 2A), H319 Reproductive toxicity (Category 2), H361

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word	Warning
Hazard statement(s) H319 H361	Causes serious eye irritation. Suspected of damaging fertility or the unborn child.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash skin thoroughly after handling.
P280	Wear eye protection/ face protection.
P281	Use personal protective equipment as required.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.

P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substances

Formula	:	$BNaO_2 \cdot 4H_2O$
Molecular weight	:	137.86 g/mol
CAS-No.	:	10555-76-7
EC-No.	:	231-891-6

# Hazardous components

Component	Classification	Concentration	
Sodium metaborate tetrahydrate			
	Eye Irrit. 2A; Repr. 2; H319,	<= 100 %	
	H361		
For the full text of the H Statements mentioned in this Section, see Section 16			

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

## **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

## In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

## If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed** No data available

# **5. FIREFIGHTING MEASURES**

# 5.1 Extinguishing media

# Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# 5.2 Special hazards arising from the substance or mixture Borane/boron oxides, Sodium oxides

# **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

# 6. ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

# 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

## **7.2** Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non Combustible Solids

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

# Components with workplace control parameters

		for parameter					
Component	CAS-No.	Value	Control parameters	Basis			
Sodium metaborate	10555-76-7	TWA	2.000000	USA. ACGIH Threshold Limit Values			
tetrahydrate			mg/m3	(TLV)			
	Remarks	Upper Respiratory Tract irritation					
		Not classifial	ble as a human ca	rcinogen			
		varies					
		TWA	2.000000	USA. ACGIH Threshold Limit Values			
			mg/m3	(TLV)			
Upper Respiratory Tract irritation			on				
		Not classifiable as a human carcinogen					
		varies					
		STEL	6.000000	USA. ACGIH Threshold Limit Values			
			mg/m3	(TLV)			
		Upper Respi	ratory Tract irritation	on			
		Not classifial	ble as a human ca	rcinogen			
		varies		_			
		STEL	6.000000	USA. ACGIH Threshold Limit Values			
			mg/m3	(TLV)			
		Upper Respiratory Tract irritation					
		Not classifiable as a human carcinogen					
		varies					

# 8.2 Exposure controls

# Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# Personal protective equipment

# Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

# Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## **Body Protection**

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: crystalline Colour: white		
b)	Odour	No data available		
c)	Odour Threshold	No data available		
d)	рН	No data available		
e)	Melting point/freezing point	No data available		
f)	Initial boiling point and boiling range	No data available		
g)	Flash point	Not applicable		
h)	Evaporation rate	No data available		
i)	Flammability (solid, gas)	No data available		
j)	Upper/lower flammability or explosive limits	No data available		
k)	Vapour pressure	No data available		
I)	Vapour density	No data available		
m)	Relative density	No data available		
n)	Water solubility	No data available		
0)	Partition coefficient: n- octanol/water	No data available		
p)	Auto-ignition temperature	No data available		
q)	Decomposition temperature	No data available		
r)	Viscosity	No data available		
s)	Explosive properties	No data available		
t)	Oxidizing properties	No data available		
Other safety information No data available				

9.2

# **10. STABILITY AND REACTIVITY**

- 10.1 Reactivity No data available
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** No data available
- **10.5** Incompatible materials Strong oxidizing agents
- **10.6 Hazardous decomposition products** Other decomposition products - No data available In the event of fire: see section 5

# **11. TOXICOLOGICAL INFORMATION**

# 11.1 Information on toxicological effects

# Acute toxicity

No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation** No data available

Serious eye damage/eye irritation Moderate eye irritation

**Respiratory or skin sensitisation** No data available

Germ cell mutagenicity No data available

## Carcinogenicity

No data available

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

# **Reproductive toxicity**

Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

# **Additional Information**

**RTECS: Not available** 

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **12. ECOLOGICAL INFORMATION**

# 12.1 Toxicity

No data available

- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- 12.4 Mobility in soil No data available
- **12.5** Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

# 12.6 Other adverse effects

No data available

# **13. DISPOSAL CONSIDERATIONS**

# 13.1 Waste treatment methods

# Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

# Contaminated packaging

Dispose of as unused product.

# **14. TRANSPORT INFORMATION**

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

ΙΑΤΑ

Not dangerous goods

# **15. REGULATORY INFORMATION**

# SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

# SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components		
	CAS-No.	Revision Date
Sodium metaborate tetrahydrate	10555-76-7	2010-08-02
New Jersey Right To Know Components		
	CAS-No.	Revision Date

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# **16. OTHER INFORMATION**

# Full text of H-Statements referred to under sections 2 and 3.

Eye irritation
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.
Reproductive toxicity

# **HMIS** Rating

Health hazard: Chronic Health Hazard:	2 *
Flammability:	0 0
Physical Hazard NFPA Rating	0
Health hazard:	2
Health hazard: Fire Hazard:	2 0

Reactivity Hazard:	

# **Further information**

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# **Preparation Information**

Sigma-Aldrich Corporation Product Safety - Americas Region 1-800-521-8956

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