

# SAFETY DATA SHEET

**Preparation Date:** 3/24/2015

**Revision Date:** Not Applicable

**Revision Number:** Not Applicable

**Product identifier**

**Product code:** S2605  
**Product Name:** SODIUM METABORATE, TETRAHYDRATE

**Other means of identification**

**Synonyms:** Boric acid, monosodium salt, tetrahydrate  
**CAS #:** 10555-76-7  
**RTECS #** ED4640000 (for Sodium metaborate CAS no. 7775-19-1)  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Fungicide. Insecticide.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemicals and Laboratory Products, Inc.  
14422 South San Pedro St.  
Gardena, CA 90248  
(310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

## 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 2

**Label elements**

## Warning

### Hazard statements

Causes skin irritation  
Causes serious eye irritation  
Suspected of damaging fertility or the unborn child



### Hazards not otherwise classified (HNOC)

Not Applicable

### Other hazards

Not available

### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection  
Wear protective gloves

### Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention  
Specific treatment (see .? on this label)  
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 ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

### Precautionary Statements - Storage

Store locked up

### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Sodium Metaborate Tetrahydrate 10555-76-7	10555-76-7	100	*

## 4. FIRST AID MEASURES

## 4. FIRST AID MEASURES

### First aid measures

#### **General Advice:**

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). First aider needs to protect himself. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

#### **Skin Contact:**

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention.

#### **Eye Contact:**

Flush eye with water for 15 minutes. Get medical attention.

#### **Inhalation:**

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

#### **Ingestion:**

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

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

#### **Symptoms**

Causes eye irritation. May cause skin irritation. Nose and throat irritation. Nosebleeds. Productive cough. Chest tightness. Dyspnea (Shortness of breath and difficulty breathing). Dehydration. May cause abdominal pain, nausea, vomiting, diarrhea. Central nervous system effects. May cause headache. Weakness. Convulsions. Tremors. Irritability. May cause metabolic acidosis. May affect the liver. It may affect the kidneys.

### Indication of any immediate medical attention and special treatment needed

#### **Notes to Physician:**

Treat symptomatically

### Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

#### **Suitable Extinguishing Media:**

The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

#### **Unsuitable Extinguishing Media:**

No information available.

### Specific hazards arising from the chemical

#### **Hazardous Combustion Products:**

No information available.

#### **Specific hazards:**

Not applicable. The product is not flammable.

### Special Protective Actions for Firefighters

#### **Specific Methods:**

No information available.

#### **Special Protective Equipment for Firefighters:**

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

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid dust formation.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

**Safe Handling Advice:**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

**Incompatible Materials:**

Reducing agents. Strong acids. Alkali Metals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

##### United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Sodium Metaborate Tetrahydrate - 10555-76-7	None	None	None	None

##### Canada

Components	Alberta	British Columbia	Ontario	Quebec
Sodium Metaborate Tetrahydrate - 10555-76-7	None	None	None	None

##### Australia and Mexico

Components	Australia	Mexico
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Sodium Metaborate Tetrahydrate 10555-76-7	None	None
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### Appropriate engineering controls

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

**Eye protection:** Goggles. Safety glasses with side-shields.

**Skin and body protection:** Long sleeved clothing. Chemical resistant apron. Gloves.

**Respiratory protection:** Effective dust mask. Wear respirator with dust filter..

**Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Solid.	<b>Appearance:</b> Crystalline.	<b>Color:</b> White.
<b>Odor:</b> Odorless.	<b>Taste</b> No information available	<b>Molecular/Formula weight:</b> 137.86
<b>Formula:</b> BNaO2.4H2O	<b>Flash point (°C):</b> No data available	<b>Flashpoint (°C/°F):</b> No information available.
<b>Flash Point Tested according to:</b> Not available	<b>Lower Explosion Limit (%):</b> No information available	<b>Upper Explosion Limit (%):</b> No information available
<b>Autoignition Temperature (°C/°F):</b> No information available	<b>pH:</b> No information available	<b>Melting point/range(°C/°F):</b> >500°C/ >932°F
<b>Boiling point/range(°C/°F):</b> No information available	<b>Decomposition temperature(°C/°F):</b> No information available	<b>Bulk density:</b> No information available
<b>Specific gravity:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available	<b>Density (g/cm3):</b> 1.74
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Easily soluble in hot water Soluble in cold water Solubility in water: 41.9% @ 20°C; 109.8% @ 100°C	

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with strong acids  
Reacts with reducing agents

### Chemical stability

**Stability:** Stable at normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Exposure to air. Avoid dust formation. Incompatible materials.

**Incompatible Materials:** Reducing agents. Strong acids. Alkali Metals.

**Hazardous decomposition products:** When heated to decomposition it emits toxic fumes. Sodium oxides. Boron. Boron oxides.

### Other Information

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Ingestion. Inhalation. Eyes. Skin.

### Acute Toxicity

#### Component Information

*Sodium Metaborate Tetrahydrate - 10555-76-7*

**LD50/oral/rat** = 2330 mg/kg (for Sodium metaborate CAS no. 7775-19-1)

**LD50/oral/mouse** = No information available

**LD50/dermal/rabbit** = No information available

**LD50/dermal/rat** = No information available

**LC50/inhalation/rat** = No information available

**LC50/inhalation/mouse** = No information available

**Other LD50 or LC50 information** = No information available

#### Product Information

**LD50/oral/rat** =  
**VALUE- Acute Tox Oral** = No information available

**LD50/oral/mouse** =  
**Value - Acute Tox Oral** = No information available

**LD50/dermal/rabbit**  
**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**  
**VALUE -Acute Tox Dermal** = No information available

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**LC50/inhalation/rat**

**VALUE-Vapor** = No information available

**VALUE-Gas** = No information available

**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**

**VALUE-Vapor** = No information available

**VALUE - Gas** = No information available

**VALUE - Dust/Mist** = No information available

**Symptoms**

**Skin Contact:** Causes skin irritation. Poorly absorbed through intact skin, but can penetrate open wounds or abraded skin.

**Eye Contact:** Causes serious eye irritation.

**Inhalation** Exposure to high concentrations of dust may cause sneezing, irritation of the nose, throat and dryness of the mouth, nose, and throat. It may also cause nose bleeds, sore throat, productive cough, shortness of breath and chest tightness.

**Ingestion** Acute toxic effects of borates in general are dehydration, abdominal or epigastric pain, nausea, vomiting, diarrhea, and delayed skin redness, rash. It may also affect behavior/central nervous system (headache, excitement or depression, lethargy, weakness, seizures/convulsions, irritability, tremors, muscle contraction or spasticity, dizziness), liver (hepatitis, jaundice, hepatomegaly), kidneys (nephrosis, oliguria, albuminuria, anuria). In severe cases, low blood pressure, thready pulse, cold clammy skin, cyanosis, cardiac arrhythmias, acute renal failure, and metabolic acidosis may occur. Ingestion of over 1 gram can result in severe gastrointestinal irritation, kidney injury, and even death from central nervous system depression or vascular collapse, especially in infants. Ingestion of 5 to 10 grams can cause severe vomiting, diarrhea, shock and death.

**Aspiration hazard** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** Chronic exposures can produce eye irritation, coughing, and skin rash (the latter following ingestion). Prolonged or repeated ingestion may affect the liver, kidneys. It may also cause mild gastrointestinal tract effects.  
Prolonged or repeated inhalation can irritate the lungs. It may cause nosebleeds, and bronchitis to develop with cough, phlegm, and/or shortness of breath.  
Skin: Prolonged or repeated skin contact may cause dermatitis, skin rash, dryness and redness.

**Sensitization:** No information available

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic.

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Sodium Metaborate Tetrahydrate	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

**Reproductive toxicity** Suspected of damaging fertility or the unborn child

**Reproductive Effects:** Possible risk of impaired fertility.  
**Developmental Effects:** Possible risk of harm to the unborn child  
**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available  
**STOT - repeated exposure** No information available  
**Target Organs:** Respiratory system. Kidneys. Lungs.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** No data available.  
**Persistence and degradability:** No information available  
**Bioaccumulative potential:** No information available.  
**Mobility:** No information available

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

**Waste from residues / unused products:**  
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**  
Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Sodium Metaborate Tetrahydrate	None	None	None	None

**14. TRANSPORT INFORMATION**

**DOT**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** Not applicable  
**Packing Group:** None  
**ERG No:** No information available  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available

**TDG (Canada)**

**Product code:** S2605

**Product name:** SODIUM METABORATE, TETRAHYDRATE



## 14. TRANSPORT INFORMATION

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class:</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing Group:</b>	No information available
<b>Description:</b>	No information available

### ADR

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class:</b>	No information available
<b>Packing Group:</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Classification Code:</b>	No information available
<b>Description:</b>	No information available
<b>CEFIC Tremcard No:</b>	No information available

### IMO / IMDG

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class:</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing Group:</b>	No information available
<b>Description:</b>	No information available
<b>IMDG Page:</b>	No information available
<b>Marine Pollutant</b>	No information available
<b>MFAG:</b>	No information available
<b>Maximum Quantity:</b>	No information available

### RID

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class:</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing Group:</b>	No information available
<b>Classification Code:</b>	No information available
<b>Description:</b>	No information available

### ICAO

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class:</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing Group:</b>	No information available
<b>Description:</b>	No information available

### IATA

<b>UN-No:</b>	Not Regulated
<b>Proper Shipping Name:</b>	No information available
<b>Hazard Class:</b>	No information available
<b>Subsidiary Risk:</b>	No information available
<b>Packing Group:</b>	No information available
<b>Description:</b>	No information available

## 15. REGULATORY INFORMATION

## 15. REGULATORY INFORMATION

### International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Sodium Metaborate Tetrahydrate	Not Listed	Not present	Present	Present (1)-69	Present	Present	Not present

### U.S. Regulations

#### California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

##### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

##### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Sodium Metaborate Tetrahydrate	Not Listed	Not Listed	Not Listed	Not Listed

### CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Sodium Metaborate Tetrahydrate	None	None	None	None	None

### U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Sodium Metaborate Tetrahydrate	Not Applicable	Not Applicable

### Canada

#### WHMIS hazard class:

D2B Toxic materials

#### Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

### Inventory

Components	Canada (DSL)	Canada (NDSL)
Sodium Metaborate Tetrahydrate	Not Listed	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Sodium Metaborate Tetrahydrate	Not listed	Not listed

### EU Classification

Product code: S2605

Product name: SODIUM  
METABORATE, TETRAHYDRATE

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**R-phrase(s)**

R60 - May impair fertility.

R61 - May cause harm to the unborn child.

none

**S -phrase(s)**

S53 - Avoid exposure - obtain special instructions before use.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Components	Classification	Concentration Limits:	Safety Phrases
Sodium Metaborate Tetrahydrate		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

T - Toxic

T

**16. OTHER INFORMATION**

**Preparation Date:** 3/24/2015  
**Revision Date:** Not Applicable  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**