

SAFETY DATA SHEET

Preparation Date: 05/22/2015

Revision date 10/11/2019

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: S1589
Product Name: SODIUM PERBORATE, MONOHYDRATE

Other means of identification

Synonyms: Sodium borate, monohydrate
 Sodium perborate monohydrate
CAS #: 10332-33-9
RTECS # SC7320000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Bleaching agent. Detergents. In denture cleaners.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 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: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Oxidizing solids	Category 3

Label elements

Danger

Hazard statements

Harmful if swallowed
 Causes serious eye irritation
 May damage fertility or the unborn child

May cause respiratory irritation
May intensify fire; oxidizer



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Causes mild skin irritation

Precautionary Statements - 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 face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep/Store away from clothing and other combustible materials
Take any precaution to avoid mixing with combustibles

Precautionary Statements - Response

IF exposed or concerned: Get medical attention

IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO2 or Halon may provide limited control.

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 attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Sodium Perborate, Monohydrate	10332-33-9	100

4. FIRST AID MEASURES

First aid measures

General Advice:

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. 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 clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
- Eye Contact:** Flush eyes 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. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

- Symptoms**
- Causes serious eye irritation
 - Irritating to respiratory system
 - May cause skin irritation
 - Mild skin irritation
 - Causes digestive (gastrointestinal) tract irritation
 - May cause abdominal pain, nausea, vomiting, diarrhea
 - Central nervous system effects
 - Headache
 - Convulsions
 - Ataxia

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: Water. CO2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.

Unsuitable Extinguishing Media: Dry chemical. Foam. Halons.

Specific hazards arising from the chemical

Hazardous combustion products If it is involved in a fire the following can be released:
Boron oxides. Sodium oxides.

Specific hazards Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.). The product is not flammable, but it may cause fire when in contact with other material. Contact with combustible or organic materials may cause fire. Will accelerate burning when involved in a fire. Container explosion may occur under fire conditions or when heated.

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. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material. Do not get water inside containers.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

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. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill. 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. Do not ingest. Do not breathe dust. Keep away from combustible material. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Moisture sensitive. Protect from moisture. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Do not store near combustible materials. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:

Reducing agents
Heavy metal salts
Combustible materials
Organic materials

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Sodium Perborate, Monohydrate	10332-33-9	None	None	None	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Sodium Perborate, Monohydrate	10332-33-9	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Sodium Perborate, Monohydrate	10332-33-9	None	None

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
- Skin and body protection:** Chemical resistant apron
Long sleeved clothing
Gloves
- Respiratory protection:** Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
- 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

Physical state:
Solid

Appearance:
Crystalline powder. Powder.

Color:
White.

Odor:
Odorless.

Taste
No information available.

Formula
NaBO3.H2O

Molecular/Formula weight (g/mole):
99.81

Flammability (solid, gas)
no data available

Flashpoint (°C/°F):
No information available

Flash Point Tested according to:
Not available

Autoignition Temperature (°C/°F):
No information available

Lower Explosion Limit (%):
No information available

Product code: S1589

Product name: SODIUM
PERBORATE, MONOHYDRATE

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Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): No information available	Decomposition temperature(°C/°F): 60 °C/140 °F
Boiling point/range(°C/°F): No information available	Bulk density: No information available	Density (g/cm3): 0.4-0.65 @ 20 °C
Specific gravity: No information available	pH No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Solubility in Water: 15 g/L at 20 deg. C	

10. STABILITY AND REACTIVITY

Reactivity

Oxidizer. Reacts with strong reducing agents, heavy metal salts, organic and combustible materials
 Contact with combustible materials (wood, paper, oil, clothing, etc.) may cause fire
 Reaction with water may generate heat

Chemical stability

Stability: Moisture Sensitive. Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Contact with combustible materials (wood, paper, oil, clothing, etc.). Moisture sensitive. Exposure to water. Exposure to moisture.

Incompatible Materials:
 Reducing agents
 Heavy metal salts
 Combustible materials
 Organic materials

Hazardous decomposition products: Sodium oxides. 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. Skin.

Acute Toxicity

Component Information

Sodium Perborate, Monohydrate	
CAS No	10332-33-9

LD50/oral/rat = 770 - 2100 mg/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = >2000 mg/kg
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 Toxicity = 770 mg/kg

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

LD50/dermal/rabbit
Value - Acute Toxicity = > 2000 mg/kg

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

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: May cause skin irritation. Mild skin irritation.

Eye Contact: Causes serious eye irritation.

Inhalation Irritating to respiratory system.

Ingestion Harmful if swallowed. Causes digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting, diarrhea. May cause abdominal pain. May cause central nervous system effects (affect behavior). It may affect behavior/central nervous system (irritability). May affect behavior/central nervous system (ataxia). May affect behavior/central nervous system (convulsions/seizures). May cause headache. It may affect the kidneys and liver.

Aspiration hazard No information available.

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

Chronic Toxicity Prolonged or repeated ingestion may affect metabolism (cause anorexia, weight

loss). Prolonged or repeated ingestion may cause nausea, vomiting, diarrhea. Prolonged or repeated ingestion may affect the blood (anemia).

Sensitization: No information available.

Mutagenic Effects: May affect genetic material

Carcinogenic effects: Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Sodium Perborate, Monohydrate	10332-33-9	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity May damage fertility or the unborn child

Reproductive Effects: May cause adverse reproductive effects based on animal data
Experiments have shown reproductive toxicity effects on laboratory animals

Developmental Effects: May cause harm to the unborn child

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure central nervous system.

STOT - repeated exposure No information available.

Target Organs: Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects 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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Sodium Perborate, Monohydrate	10332-33-9	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN3377
Proper Shipping Name: Sodium perborate monohydrate
Hazard Class 5.1
Subsidiary Class No information available
Packing group: III
Emergency Response Guide Number 140
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions B120, IB8, IP3, T1, TP33
Symbol(s): No information available
Description: UN3377, Sodium perborate monohydrate, 5.1, III

TDG (Canada)

UN-No: UN3377
Proper Shipping Name: Sodium perborate monohydrate
Hazard Class 5.1
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant No Information available
Description: UN3377, Sodium perborate monohydrate, 5.1, III

ADR

UN Number UN3377
Proper Shipping Name: Sodium perborate monohydrate
Transport hazard class(es) 5.1
Packing group III
Subsidiary Risk: No information available
Description: UN3377, Sodium perborate monohydrate, 5.1, III

IMDG

UN-No: UN3377
Proper Shipping Name: Sodium perborate monohydrate
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant No information available
EMS: F-A
Special Provisions 967
Description UN3377, Sodium perborate monohydrate, 5.1, III

RID

UN Number UN3377
Proper Shipping Name: Sodium perborate monohydrate
Transport hazard class(es) 5.1

Subsidiary Risk: 5.1
Packing group: III
Description: UN3377, Sodium perborate monohydrate, 5.1, III

ICAO (air)

UN-No: UN3377
Proper Shipping Name: Sodium perborate monohydrate
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: III
Description: UN3377, Sodium perborate monohydrate, 5.1, III

IATA

UN Number: UN3377
Proper Shipping Name: Sodium perborate monohydrate
Transport hazard class(es): 5.1
Subsidiary Risk: No information available
Packing group: III
Precautionary Statements - Response: 5L
Special Provisions: No information available
Description: UN3377, Sodium perborate monohydrate, 5.1, III

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Sodium Perborate, Monohydrate	10332-33-9	Not Listed	Not present	Present	Present (1)-826	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)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Sodium Perborate, Monohydrate	10332-33-9	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	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 de minimis
Sodium Perborate, Monohydrate	10332-33-9	None	None	None	None	None

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Sodium Perborate, Monohydrate	10332-33-9	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has not been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Sodium Perborate, Monohydrate	10332-33-9	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Sodium Perborate, Monohydrate	10332-33-9	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Sodium Perborate, Monohydrate	10332-33-9	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Sodium Perborate, Monohydrate	10332-33-9	

EU - CLP (1272/2008)

R-phrase(s)

R 8 - Contact with combustible material may cause fire.
R22 - Harmful if swallowed
R37 - Irritating to respiratory system
R41 - Risk of serious damage to eyes
R61 - May cause harm to the unborn child
R62 - Possible risk of impaired fertility

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)

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Sodium Perborate, Monohydrate	10332-33-9	Xn; R22 Xi; R37-41 Repr. Cat. 2; R61 Repr. Cat. 3; R62 O; R8	No information	S53 S45

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

Indication of danger:

O - Oxidising.

Xn - Harmful

Xi - Irritant



16. OTHER INFORMATION

Preparation Date: 05/22/2015
Revision date 10/11/2019
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