

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
 Date of issue: 05/06/2015 Revision date: 11/03/2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Product name : BTE Solid

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Corrosion and Scale Inhibitor

1.3. Details of the supplier of the safety data sheet

Hastings Premium Filters
 4400 E Highway 30
 Kearney, NE 68847 - US
 T 800-887-8836
info@hastingsfilter.com - www.hastingsfilter.com

1.4. Emergency telephone number

Emergency number : 800-424-9300 Inside the U.S., Canada and the U.S. Virgin Islands
 703-527-3887 Outside the U.S. (Collect calls accepted.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 3 (Oral) H301
 Skin Corr. 1C H314
 Carc. 1B H350
 Repr. 1B H360
 STOT SE 3 H335
 Aquatic Acute 1 H400

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H301 - Toxic if swallowed
 H314 - Causes severe skin burns and eye damage
 H335 - May cause respiratory irritation
 H350 - May cause cancer
 H360 - May damage fertility or the unborn child
 H400 - Very toxic to aquatic life

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 - Wash hands, forearms and face thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area
 P273 - Avoid release to the environment
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P301+P310 - If swallowed: Immediately call a poison center/doctor
 P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

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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
P310 - Immediately call a poison center/doctor
P312 - Call a poison center/doctor if you feel unwell
P321 - Specific treatment (see First aid measures on this label)
P330 - Rinse mouth
P363 - Wash contaminated clothing before reuse
P391 - Collect spillage
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose in a safe manner in accordance with local/national regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Sodium Nitrite	(CAS No) 7632-00-0	30 - 60	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400
Disodium Trioxosilicate	(CAS No) 6834-92-0	10 - 30	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 STOT SE 3, H335
Tolyltriazole	(CAS No) 29385-43-1	5 - 10	Acute Tox. 4 (Oral), H302
Disodium Tetraborate, Anhydrous	(CAS No) 1330-43-4	1 - 5	Repr. 1B, H360
Benzo-triazole	(CAS No) 95-14-7	1 - 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Acute 3, H402
Phenolphthalein	(CAS No) 77-09-8	< 1	Muta. 2, H341 Carc. 1B, H350

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician. Specific treatment (see First aid measures on this label).

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

Symptoms/injuries : Causes severe skin burns and eye damage. May cause cancer. May damage fertility or the unborn child.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity : Thermal decomposition generates : Corrosive vapors.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe dust/fume/gas/mist/vapors/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.
Storage conditions : Keep only in the original container in a cool, well-ventilated place. Keep container tightly closed.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

BTE	
ACGIH	Not applicable
OSHA	Not applicable
Phenolphthalein (77-09-8)	
ACGIH	Not applicable
OSHA	Not applicable

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Disodium Trioxosilicate (6834-92-0)		
ACGIH	Not applicable	
OSHA	Not applicable	
Disodium Tetraborate, Anhydrous (1330-43-4)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (inhalable particulate matter)
ACGIH	ACGIH STEL (mg/m ³)	6 mg/m ³ (inhalable particulate matter)
OSHA	Not applicable	
Sodium Nitrite (7632-00-0)		
ACGIH	Not applicable	
OSHA	Not applicable	
Benzotriazole (95-14-7)		
ACGIH	Not applicable	
OSHA	Not applicable	
Tolyltriazole (29385-43-1)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure control

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves/protective clothing/eye protection/face protection protective gloves.
Eye protection	: Chemical goggles or faceshield.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Color	: White to yellowish
Odor	: slight
Odor threshold	: No data available
pH	: 10.5 at 1% solution
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: ≤ 0.013 kPa
Relative vapor density at 20 °C	: ≤ 1
Relative density	: Not available
Specific gravity / density	: 0.881 g/ml
Solubility	: Water: Not available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available

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Viscosity, dynamic	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed.

TR84746	
ATE US (oral)	147.537 mg/kg body weight
Disodium Trioxosilicate (6834-92-0)	
LD50 oral rat	1153 mg/kg
ATE US (oral)	1153.000 mg/kg body weight
Disodium Tetraborate, Anhydrous (1330-43-4)	
LD50 oral rat	2660 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	2660.000 mg/kg body weight
Sodium Nitrite (7632-00-0)	
LD50 oral rat	85 mg/kg
LC50 inhalation rat (mg/l)	5.5 mg/l/4h
ATE US (oral)	85.000 mg/kg body weight
ATE US (vapors)	5.500 mg/l/4h
ATE US (dust, mist)	5.500 mg/l/4h
Benzotriazole (95-14-7)	
LD50 oral rat	560 mg/kg
LC50 inhalation rat (mg/l)	1910 mg/m ³ (Exposure time: 3 h)
ATE US (oral)	560.000 mg/kg body weight
ATE US (dust, mist)	1.430 mg/l/4h
Tolytriazole (29385-43-1)	
LD50 oral rat	675 mg/kg
ATE US (oral)	675.000 mg/kg body weight

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 10.5 at 1% solution
Serious eye damage/irritation	: Not classified pH: 10.5 at 1% solution

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Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.

Phenolphthalein (77-09-8)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Toxic if swallowed.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

Disodium Trioxosilicate (6834-92-0)	
LC50 fish 1	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
LC50 fish 2	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
Disodium Tetraborate, Anhydrous (1330-43-4)	
LC50 fish 1	340 mg/l (Exposure time: 96 h - Species: Limanda limanda)
EC50 Daphnia 1	1085 - 1402 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Sodium Nitrite (7632-00-0)	
LC50 fish 1	0.19 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
LC50 fish 2	0.092 - 0.13 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Benzotriazole (95-14-7)	
LC50 fish 1	39 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	141.6 mg/l (Exposure time: 48 h - Species: water flea)

12.2. Persistence and degradability

TR84746	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

TR84746	
Bioaccumulative potential	Not established.
Disodium Tetraborate, Anhydrous (1330-43-4)	
BCF fish 1	(no evidence of bioaccumulation)
Sodium Nitrite (7632-00-0)	
Log Pow	-3.7 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on global warming : No known effects from this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

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Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

UN-No.(DOT) : UN2923

UN-No. (IMDG) : 2923

UN-No. (IATA) : 2923

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Corrosive solids, toxic, n.o.s.
(Disodium Trioxosilicate, Sodium Nitrite)

RQ of 180 lb due to Sodium Nitrite

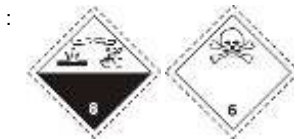
Proper Shipping Name (IMDG) : CORROSIVE SOLID, TOXIC, N.O.S.
(Disodium Trioxosilicate, Sodium Nitrite)

Proper Shipping Name (IATA) : Corrosive solid, toxic, n.o.s.
(Disodium Trioxosilicate, Sodium Nitrite)

14.3. Transport hazard class(es)

Class (DOT) : 8 - Corrosive, 6.1 - Poison

Hazard labels (DOT) : 8, 6.1



Transport hazard class(es) (IMDG) : 8 (6.1)

Hazard labels (IMDG) : 8, 6.1



Transport hazard class(es) (IATA) : 8 (6.1)

Hazard labels (IATA) : 8, 6.1



14.4. Packing group

Packing group (DOT) : III

Packing group (IMDG) : III

Packing group (IATA) : III

14.5. Environmental hazards

Marine pollutant(DOT) : No

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Marine pollutant(IMDG)	: Yes
Marine pollutant(IATA)	: Yes
Marine Pollutant Component(s)	: Sodium Nitrite

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Phenolphthalein	CAS No 77-09-8	< 1%
Sodium Nitrite	CAS No 7632-00-0	30 - 60%
Ethylene oxide	CAS No 75-21-8	< 1%

Polyethylene Glycol (25322-68-3)

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))
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Phenolphthalein (77-09-8)

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting	0.1 %
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Methyl-oxirane polymer with oxirane (9003-11-6)

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))
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Sodium Polyacrylate (9003-04-7)

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))
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Sodium Nitrite (7632-00-0)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1.0 %

Benzotriazole (95-14-7)

EPA TSCA Regulatory Flag	TP
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Ethylene oxide (75-21-8)

Listed on the United States SARA Section 302

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	10 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb
SARA Section 313 - Emission Reporting	0.1 %

Tolyltriazole (29385-43-1)

EPA TSCA Regulatory Flag	TP
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15.2. International regulations

CANADA

Phenolphthalein (77-09-8)

Listed on the Canadian DSL (Domestic Substances List)

Disodium Trioxosilicate (6834-92-0)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Class E - Corrosive Material
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Disodium tetraborate, anhydrous (1330-43-4)

Listed on the Canadian DSL (Domestic Substances List)

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Sodium Nitrite (7632-00-0)
Listed on the Canadian DSL (Domestic Substances List)
Benzotriazole (95-14-7)
Listed on the Canadian DSL (Domestic Substances List)
Tolyltriazole (29385-43-1)
Listed on the Canadian DSL (Domestic Substances List)

15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

Phenolphthalein (77-09-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	
Ethylene oxide (75-21-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	Yes	Yes	Yes	2 µg/day

SECTION 16: Other information

Revision date : 11/03/2016
Other information : None.

Full text of H-phrases:

H272	May intensify fire; oxidizer
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H402	Harmful to aquatic life

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.
NFPA specific hazard : NA - Not Applicable



HMIS III Rating
Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability : 0 Minimal Hazard
Physical : 1 Slight Hazard
Personal protection : J

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Hastings Premium Filters SDS

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its 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 materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.