

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

1.1. Product identifier

Product form : Mixture
Product name : CS100, CS5011**

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

Use of the substance/mixture : Supplemental Coolant Additive

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

Repr. 1B H360
Aquatic Acute 2 H401
Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H360 - May damage fertility or the unborn child
H401 - 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
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P308+P313 - If exposed or concerned: Get medical advice/attention
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. Substance

Not applicable

3.2. Mixture

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| Name | Product identifier | % | GHS-US classification |
|---------------------------------|--------------------|-------|--|
| Sodium Nitrite | (CAS No) 7632-00-0 | 1 - 5 | Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400 |
| Sodium Mercaptobenzothiazole | (CAS No) 2492-26-4 | 1 - 5 | Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 |
| Disodium Tetraborate, Anhydrous | (CAS No) 1330-43-4 | < 1 | Repr. 1B, H360 Aquatic Acute 3, H402 |

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 to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- 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.

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

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

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

No additional information available

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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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. Avoid contact during pregnancy/while nursing. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.
- Hygiene measures : Wash hands, forearms and face thoroughly after handling.

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 closed when not in use.
- 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

| TR84718 - Liquid | | |
|------------------|----------------|--|
| ACGIH | Not applicable | |
| OSHA | Not applicable | |

| Disodium Tetraborate, Anhydrous (1330-43-4) | | |
|---|---------------------------------|---------------------|
| ACGIH | ACGIH TWA (mg/m ³) | 2 mg/m ³ |
| ACGIH | ACGIH STEL (mg/m ³) | 6 mg/m ³ |
| OSHA | Not applicable | |

| Sodium Mercaptobenzothiazole (2492-26-4) | | |
|--|----------------|--|
| ACGIH | Not applicable | |
| OSHA | Not applicable | |

| Sodium Nitrite (7632-00-0) | | |
|----------------------------|----------------|--|
| ACGIH | Not applicable | |
| OSHA | Not applicable | |

8.2. Exposure controls

- 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 face shield.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear appropriate mask.
- 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 : Liquid
- Color : red
- Odor : mild
- Odor threshold : No data available
- pH : 10.8 - 11.8
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : No data available
- Freezing point : 0°C

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| | |
|---------------------------------|----------------------|
| 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 | : 2.4 kPa |
| Relative vapor density at 20 °C | : ≤ 1 |
| Relative density | : No data available |
| Density | : 1.042 - 1.064 g/ml |
| Solubility | : Water: 100 % |
| Log Pow | : No data available |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : Not Available. |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Explosive 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

Not established.

10.3. Possibility of hazardous reactions

Not established.

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 : Not classified

| 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 bodyweight |

| Sodium Mercaptobenzothiazole (2492-26-4) | |
|---|--------------------------|
| LD50 oral rat | 750 mg/kg |
| LD50 dermal rabbit | > 1250 mg/kg |
| ATE US (oral) | 750.000 mg/kg bodyweight |

| 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 bodyweight |
| ATE US (vapors) | 5.500 mg/l/4h |
| ATE US (dust, mist) | 5.500 mg/l/4h |

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| | |
|-----------------------------------|-------------------------------------|
| Skin corrosion/irritation | : Not classified pH: 10.8 - 11.8 |
| Serious eye damage/irritation | : Not classified pH: 10.8 - 11.8 |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |

| | |
|--|---|
| Reproductive toxicity | : May damage fertility or the unborn child. |
| Specific target organ toxicity (single exposure) | : Not classified |

| | |
|--|------------------|
| Specific target organ toxicity (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. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-----------------|--------------------------|
| Ecology - water | : Toxic to aquatic life. |
|-----------------|--------------------------|

Disodium Tetraborate, Anhydrous (1330-43-4)

| | |
|--------------------------------|---|
| LC50 fishes 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) |
| EC50 other aquatic organisms 1 | 158 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus) |
| EC50 other aquatic organisms 2 | 2.6 - 21.8 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static]) |

Sodium Mercaptobenzothiazole (2492-26-4)

| | |
|--------------------------------|--|
| LC50 fishes 1 | 0.3 - 1.1 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) |
| EC50 Daphnia 1 | 1.9 - 5.1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| EC50 other aquatic organisms 1 | 0.3 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata) |
| LC50 fish 2 | 3.8 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |

Sodium Nitrite (7632-00-0)

| | |
|---------------|---|
| LC50 fishes 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]) |

12.2. Persistence and degradability

TR84718 - Liquid

| | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |
|-------------------------------|------------------|

12.3. Bioaccumulative potential

TR84718 - Liquid

| | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
|---------------------------|------------------|

Disodium Tetraborate, Anhydrous (1330-43-4)

| | |
|------------|----------------------------------|
| BCF fish 1 | (no evidence of bioaccumulation) |
|------------|----------------------------------|

Sodium Mercaptobenzothiazole (2492-26-4)

| | |
|---------|-------|
| Log Pow | -0.46 |
|---------|-------|

Sodium Nitrite (7632-00-0)

| | |
|---------|-----------------|
| Log Pow | -3.7 (at 25 °C) |
|---------|-----------------|

12.4. Mobility in soil

No additional information available

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12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by 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. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

UN-No.(DOT) : UN3082

UN-No. (IMDG) : Non Regulated

UN-No.(IATA) : Non Regulated

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Environmentally Hazardous Substances, Liquid, N.O.S.

(Sodium Nitrite)

RQ of 2400 kg

Proper Shipping Name (IMDG) : Not applicable

Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

Department of Transportation (DOT) Hazard Classes : 9 - Class 9 (Miscellaneous dangerous materials)

Hazard labels (DOT) : 9



Transport hazard class(es) (IMDG) : Not applicable

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : III

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Marine pollutant(DOT) : No

Marine pollutant(IMDG) : No

Marine pollutant(IATA) : No

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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.

| | | |
|----------------|------------------|-------|
| Sodium Nitrite | CAS No 7632-00-0 | 1 - 5 |
|----------------|------------------|-------|

Phenolphthalein (77-09-8)

Listed on United States SARA Section 313

| | |
|---------------------------------------|-------|
| SARA Section 313 - Emission Reporting | 0.1 % |
|---------------------------------------|-------|

Sodium Nitrite (7632-00-0)

Listed on United States SARA Section 313

| | |
|--------------------------|--|
| EPA TSCA Regulatory Flag | S - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule. |
|--------------------------|--|

| | |
|---------------------------------------|-------|
| SARA Section 313 - Emission Reporting | 1.0 % |
|---------------------------------------|-------|

15.2. International regulations

CANADA

Disodium tetraborate, anhydrous (1330-43-4)

Listed on the Canadian DSL (Domestic Substances List)

Sodium Mercaptobenzothiazole (2492-26-4)

Listed on the Canadian DSL (Domestic Substances List)

Sodium Nitrite (7632-00-0)

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 and/or reproductive toxicity

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 | No significance risk level (NSRL) |
| Yes | No | No | No | |

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

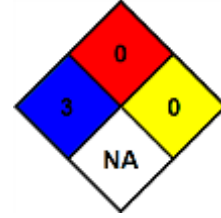
| | |
|---------------------|---|
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Acute 2 | Hazardous to the aquatic environment — Acute Hazard, Category 2 |
| Aquatic Acute 3 | Hazardous to the aquatic environment — Acute Hazard, Category 3 |
| Ox. Sol. 3 | Oxidizing Solids, Category 3 |
| Repr. 1B | Reproductive toxicity, Category 1B |
| H272 | May intensify fire; oxidizer |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H360 | May damage fertility or the unborn child |
| H400 | Very toxic to aquatic life |
| H401 | Toxic to aquatic life |
| H402 | Harmful to aquatic life |

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- 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 : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
- NFPA specific hazard : NA - Not Applicable



HMIS III Rating

- Health : 3 - Major injury likely unless prompt action is taken and medical treatment is given
- Flammability : 0
- Physical : 0
- Personal Protection : C

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.