SAFETY DATA SHEET

CS-210

Section 1. Identification

GHS product identifier : CS-210 **Product code** : Not available.

SDS# : C0043

Other means of identification

: Not available.

Product type : Liquid.

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

Identified uses : [Industrial]

Supplier/Manufacturer : DuBois Chemicals, Inc. DuBois Chemicals Canada, Inc.

3630 E. Kemper Road 1 First Canadian Place

Cincinnati, Ohio 45241 100 King Street West, Suite 1600 Phone: 1-800-438-2647 Toronto, Ontario, M5X 1G5 Canada

Phone: 1-866-861-3603

Emergency telephone

: 1-866-923-4919 (US and Canada) 01-651-523-0314 (Int'l and Mexico) number

Section 2. Hazards identification

Classification of the substance or mixture : ACUTE TOXICITY (oral) - Category 4 EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms



Signal word : Warning

Hazard statements : Harmful if swallowed.

Causes serious eye irritation.

Precautionary statements

Prevention : Wear eye/face protection. Do not eat, drink or smoke when using this product. Wash

hands thoroughly after handling.

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

mouth. 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.

: Not applicable. **Storage**

Disposal : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
sodium nitrite	10 - 20	7632-00-0
sodium xylenesulphonate	1 - 5	1300-72-7
disodium tetraborate, anhydrous	1 - 5	1330-43-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not

breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical

attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical

surveillance for 48 hours.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes.

Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes

thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and

keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be

delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion: Harmful if swallowed. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The

exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

: Use an extinguishing agent suitable for the surrounding fire.

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Handling

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	ACGIH	OSHA	Mexico	Canada
disodium tetraborate, anhydrous	TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction		STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction	TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction. STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction.

Engineering measures

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory

: If a risk assessment indicates this is necessary, use a properly fitted, air-purifying or airfed respirator complying with an approved standard. 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.

Hands

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: splash goggles

Skin

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Personal protective equipment (Pictograms)



Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Clear Pale color. Yellow.

Odor : Not available.
Odor threshold : Not available.

pH : 9.9

Melting point: Not available.Boiling point: Not available.

Flash point : Closed cup: Not applicable.

Burning time : Not applicable.
Burning rate : Not applicable.
Evaporation rate : Not available.

Section 9. Physical and chemical properties

Flammability (solid, gas) Lower and upper explosive

(flammable) limits

: Not available. : Not available.

Vapor pressure : Not available. Vapor density : Not available.

Relative density 1.16

Solubility : Easily soluble in the following materials: cold water and hot water.

Solubility in water : Not available. Partition coefficient: n-

octanol/water

VOC content

: Not available.

Auto-ignition temperature Decomposition temperature Viscosity

: Not available. : Not available. : Not available. : Not available. : Not available

Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous

Elemental Phosphorus

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid **Incompatible materials** : No specific data.

Hazardous decomposition

: Not available.

products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Storage

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 11. Toxicological information

Information on toxicological effects

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
sodium nitrite disodium tetraborate, anhydrous	- A4	2A -	-	-	1 1	-

Information on the likely routes of exposure

Dermal contact. Eye contact. Inhalation.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be

delayed following exposure.

Skin contact : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Animal ingestion studies in several species, at high doses, indicate that boric acid and

certain inorganic borates can cause reproductive and developmental effects. A human

study of occupational exposure to borate dust showed no adverse effect on reproduction.

General : No known significant effects or critical hazards.Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	907.5 mg/kg

Section 12. Ecological information

Ecotoxicity : Not available.

Aquatic ecotoxicity

Not available.

Section 13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any byproducts should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

IATA/IMDG/DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 5

: TSCA 5(a)2 final significant new use rules: sodium nitrite

TSCA 12(b) one-time export: sodium nitrite

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 311: sodium nitrite

CERCLA: Hazardous substances.: sodium nitrite: 100 lbs. (45.4 kg);

EPA Registration Number

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) Not available.Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

SARA 311/312

: Not applicable.

Classification : ACUTE TOXICITY (oral) - Category 4 EYE IRRITATION - Category 2A

SARA 313

	Product name	CAS number	%
Supplier notification	sodium nitrite	7632-00-0	10 - 20

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: SODIUM NITRITE; BORATES, TETRA, SODIUM

SALTS

New York : The following components are listed: Sodium nitrite

New Jersey : The following components are listed: SODIUM NITRITE; NITROUS ACID, SODIUM

SALT; BORATE COMPOUNDS, Inorganic

Pennsylvania : The following components are listed: NITROUS ACID, SODIUM SALT; BORON

SODIUM OXIDE

California Prop. 65

None present.

Canada

Canadian lists

Canadian NPRI : The following components are listed: sodium nitrite

Canada inventory : All components are listed or exempted.

Canadian PCP/DIN Number : Not available.

International regulations

Section 15. Regulatory information

International lists

: Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.

Korea inventory: All components are listed or exempted. **Malaysia Inventory (EHS Register)**: Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI): All components are listed or

exempted.

Thailand inventory: Not determined. Turkey inventory: Not determined.

Vietnam inventory: All components are listed or exempted.

Section 16. Other information

History

Date of printing : 11/2/2020 Date of issue/Date of : 11/2/2020

revision

Date of previous issue : No previous validation

Version : 1

Notice to reader

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.