



Safety Data Sheet

NFPA

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
SPECIFIC HAZARD	

HMIS

HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	E

SECTION 1: IDENTIFICATION

Manufactured by:

DRS Laboratories, Inc.
PO Box 20247
Lehigh Valley, PA 18002
Non-Emergency: 888-377-1533
E-mail address: info@drslaboratories.com

For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC (24 Hours)
Within USA and Canada: **1-800-424-9300**
Outside USA and Canada: **+1 703-527-3887**
CHEMTREC Contract No: CCN655572

Product Identifier: **MCS Neutralizer Tablets (40 Gram Size)**
Common Name: Chlorine Dioxide Waste Water Neutralizer
Recommended Use: Mini Chlorine Dioxide System (MCS) Use ONLY
Restrictions on Use: Restricted for use on the Mini Chlorine Dioxide System (MCS) ONLY

SECTION 2: HAZARD(S) IDENTIFICATION

OSHA REGULATORY STATUS: This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Signal Word: WARNING

Precautionary Statement: May be harmful if inhaled, swallowed or absorbed through skin. Dust may irritate eyes, skin, mucous membranes and respiratory tract. **AVOID** contact with eyes, skin and clothing. Wear protective eyewear (goggles, face shield or safety glasses), lab coat, dust respirator, gloves. Avoid breathing dust. Avoid prolonged or repeated exposure. Use with adequate ventilation. Wash thoroughly after handling.

GHS SYMBOL: Exclamation Mark



Precautionary Statement(s) - Prevention

Do not breathe dust -- In case of inadequate ventilation, wear respiratory protection -- Wear protective gloves, protective clothing, eye, and face protection -- Wash thoroughly after handling -- Use in a well-ventilated area -- Do not eat, drink or smoke when using this product -- Keep away from heat -- Keep/Store away from clothing and other combustible materials -- Take any precaution to avoid mixing with combustibles.

Precautionary Statement(s) - Response

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

IF IN EYES: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

IF SWALLOWED: Rinse mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

IF ON SKIN: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Precautionary Statement(s) - Storage

Store the unused, unopened Neutralization pouches in a cool, dry, well-ventilated area away from direct sunlight and heat and in an area inaccessible to children. Keep container tightly closed and store locked up.

Precautionary Statement(s) - Disposal

Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

Hazards Not Otherwise Classified (HNOC)

None identified

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS
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INGREDIENT	CAS #	WEIGHT IN PERCENT (%)
Sodium bicarbonate	144-55-8	0-99.9
Sodium thiosulfate anhydrous	7772-98-7	0-99.9

NOTE: The percentage by weight values reported for this product represent approximate formulation values.

SECTION 4: FIRST-AID MEASURES

INHALATION:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
INGESTION:	Rinse mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.
SKIN CONTACT:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
EYE CONTACT:	Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Protection of First-Aiders: Protect yourself by avoiding contact with this material. Avoid contact with skin and eyes. Do not ingest. Do not breathe dust. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations. At minimum, treating personnel should utilize PPE sufficient for prevention of bloodborne pathogen transmission.

Notes to Physician: Treat symptomatically

SECTION 5: FIRE-FIGHTING MEASURES
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Fire Hazards:	The product is not flammable.
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting:	As in any fire, wear NIOSH approved positive-pressure self-contained breathing apparatus and full protective gear.
Specific Hazards:	When heated to decomposition it emits toxic fumes Dry trituration with oxidizing agents such as Potassium chlorate, Potassium permanganate, or nitrate may cause explosion. When Sodium nitrite and Sodium Thiosulfate were mixed, heated, and evaporated to dryness, violent explosion occurred.
Sensitivity to Static Discharge:	Not Sensitive.
Flash Point:	Not Applicable.
Lower Flammability Level (air):	Not flammable
Upper Flammability Level (air):	Not flammable
Auto-ignition Temperature:	Not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Prevent product from entering drains.

Methods and Materials for Containment and Cleaning Up: Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading. Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Do not taste or swallow. Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or dust when opening container. Avoid creation of dust or fumes. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the SDS. Wash thoroughly after handling. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Safe Storage Conditions: Store and handle in accordance with all current regulations and standards. Store in tightly closed, labeled containers away from combustible materials. Store in a cool, dry area. Store in a well-ventilated area. Do not allow water to get in container. Store below 125 °F (52 °C). Avoid exposure to sunlight or ultraviolet light. Keep separated from incompatible substances (see below or Section 10 of the SDS).

Incompatibilities/ Materials to Avoid: Acids. Oxidizing agents.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): None. This product does not contain any components that have regulatory occupational exposure limits (OEL's) established.

ENGINEERING CONTROLS: 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.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear chemical safety goggles. Where splashing or spraying is possible, use a face-shield in addition to chemical protective goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: Wear protective clothing to minimize skin contact. Contaminated clothing should be removed and laundered before reuse.

Hand Protection: Wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

Protective Material Types: Neoprene

Respiratory Protection: A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid, Tablets
Color:	White
Odor:	Odorless
Decomposition Temperature:	> 50 °C (122 °F)
Boiling Point/Range:	No data available, Thermal decomposition
Freezing Point/Range:	No data available
Melting Point/Range:	No data available
Vapor Pressure:	No data available, Thermal decomposition

Vapor Density (air=1):	No data available
Density:	No data available
Water Solubility:	Soluble in water
pH:	No data available
Evaporation Rate (ether=1):	Not applicable
Partition Coefficient (n-octanol/water):	No data available
Flash point:	Not applicable
Flammability (solid, gas):	Not flammable
Lower Flammability Level (air):	Not flammable
Upper Flammability Level (air):	Not flammable
Auto-ignition Temperature:	Not applicable
Viscosity:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Reactive with acids, reactive with oxidizing agents, contact with acids releases sulfur dioxide and/or hydrogen sulfide gas, contact with oxidizers causes a vigorous exothermic reaction.

Chemical Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions: Hazardous polymerization does not occur.

Conditions to Avoid: Avoid exposure to moisture. To avoid thermal decomposition, do not overheat.

Incompatibilities/Materials To Avoid: Acids. Oxidizing agents.

Hazardous Decomposition Products: No information available.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Principal Routes of Exposure: Ingestion, Inhalation.

Component Toxicity Data:

NOTE: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

<u>Component</u>	<u>LD50 Oral:</u>	<u>LD50 Dermal:</u>	<u>LC50 Inhalation:</u>
Sodium thiosulfate 7772-98-7	No information available	No information available	No information available
Sodium bicarbonate 144-55-8	> 4,000 mg/kg (Rat)	No information available	> 4.74 mg/L (Rat)

SIGNS AND SYMPTOMS OF EXPOSURE:

Depending on the degree and duration of exposure, possible signs and symptoms from contact of this material with the skin and eyes, breathing this material, and swallowing this material may include:

Inhalation (Breathing): May cause irritation of respiratory tract.

Skin: May cause skin irritation.

Eye: May cause eye irritation.

Ingestion (Swallowing): Sodium Thiosulfate is an agent with a low order of toxicity. Ingestion of large doses may cause gastrointestinal irritation or disturbances with nausea, vomiting, abdominal cramping, diarrhea, metabolic acidosis, and hypernatremia. It may result in a cathartic (laxative, purging) effect. May also affect respiration (cyanosis, respiratory stimulation), cardiovascular (hypotension), behavior (ataxia, convulsions).

GHS HEALTH HAZARDS:

Not considered Hazardous

CARCINOGENICITY: Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC, or OSHA.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity Data

Acute Toxicity:

Fishes, *Oncorhynchus mykiss*, LC50, 96 h, 7,700 mg/l, Fishes, *Oncorhynchus mykiss*, NOEC, 96 h, 2,300 mg/l, Fishes, *Lepomis macrochirus*, LC50, 96 h, 7,100 mg/l, Fishes, *Lepomis macrochirus*, NOEC, 96 h, 5,200 mg/l, Crustaceans, *Daphnia magna*, EC50, 48 h, 4,100 mg/l, Crustaceans, *Daphnia magna*, LOEC, 48 h, 3,100 mg/l

Chronic Toxicity: Daphnia Magna, NOEC, 21 Days >576 mg/l

Persistence and Biodegradation: No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste from material: Dispose in accordance with all applicable regulations. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. May be subject to disposal regulations.

Container Management: Container management: Do not reuse or refill this container. Offer for recycling if available. Triple Rinse container promptly after emptying. Triple Rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Container rinsate must be disposed of in compliance with applicable regulations. Refer to label for further details.

SECTION 14: TRANSPORT INFORMATION

Transport Classification: Not a DOT controlled material (United States).
Not an IATA/ICAO controlled (regulated) material.

SECTION 15: REGULATORY INFORMATION

US Regulations

OSHA REGULATORY STATUS:

This material is NOT considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

National Inventory Status

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt.

TSCA 12(b): This product is not subject to export notification.

Canadian Chemical Inventory: All components of this product are listed on either the DSL or the NDSL.

State Regulations

California Proposition 65:

This product does not contain any chemicals known to State of CA to cause cancer, birth defects, or any other reproductive harm.

CANADIAN REGULATIONS

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

WHMIS - Classifications of Substances:

- D2B - Toxic material
- Uncontrolled product according to WHMIS classification criteria including 0.079%, 0.79%, 7.9%

SECTION 16: OTHER INFORMATION

Revision Number: 2

Section(s) Revised In this Version:

- Changed the SDS format to meet the GHS requirements.
- CHEMTREC Contract No added.
- Revised Hazard(s) Identification information: SEE SECTION 2
- Emergency Overview was revised: SEE SECTION 2
- Added OSHA Status: SEE SECTION 2
- Added GHS Information: SEE SECTION 2
- Updated First Aid Measures: SEE SECTION 4

Product Name: MCS Neutralizer Tablets

Effective Date: 19Sep2012

Version: 1.2

Revision Date: 17Jun2015

- Modified Fire Fighting Measure Recommendations: SEE SECTION 5
- Revised Accidental Release Measures: SEE SECTION 6
- Revised Handling and Storage Recommendations: SEE SECTION 7
- Updated Exposure Controls / Personal Protection. SEE SECTION 8
- Updated Physical and Chemical Properties. SEE SECTION 9
- Stability and Reactivity recommendations: SEE SECTION 10
- Toxicological Information has been revised: SEE SECTION 11
- Updated Disposal Considerations. SEE SECTION 13
- Updated FIFRA Regulations: SEE SECTION 15
- Revised Preparer Information: SEE SECTION 16
- Added SDS Revision Date: SEE SECTION 16
- Added "End of Safety Data Sheet" phrase

Prepared By: DRS Laboratories, Inc.

The information in this Safety Data Sheet should be provided to all who use, handle, transport, or otherwise are exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and persons working with or handling this product. The information presented in this SDS is premised upon proper handling and anticipated uses, and is for the material without chemical additions/alterations. Additionally, if this Safety Data Sheet is more than three years old, please contact this supplier at the phone number in Section 1 to make sure this sheet is current.

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. 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, DRS Laboratories, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet