

Issue Date 18-Sep-2015

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Version 1

1. IDENTIFICATION

Product identifier**Product Name** Inorganics Disinfection By-Products QC Standard**Other means of identification****Product Code** QCI-017**UN/ID no.** Final product is not regulated.**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended Use** For Laboratory Use Only.**Uses advised against** No information available**Details of the supplier of the safety data sheet****Manufacturer Address**NSI Lab Solutions, Inc.
7212 ACC Blvd.
Raleigh, NC 27617**Emergency telephone number****Company Phone Number** 800-234-7837**FAX** 919-789-3019**Website** www.nsilabsolutions.com**E-mail address** nsi@nsilabsolutions.com**Emergency Telephone** 919-349-7322

2. HAZARDS IDENTIFICATION

Classification**OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements**Emergency Overview**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance No information available**Physical state** Liquid**Odor** No information available**Hazards not otherwise classified (HNOC)**

Not applicable

Other Information

Not applicable

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	98-99.8
Sodium chlorite	7758-19-2	0-0.1
Sodium bromide	7647-15-6	0-0.03
Potassium chlorate	3811-04-9	0-0.02
Potassium bromate	7758-01-2	0-0.005

Refer to Certificate of Analysis for exact percentage concentration.

4. FIRST AID MEASURES

Description of first aid measures

- Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
- Skin contact** Wash skin with soap and water.
- Inhalation** Remove to fresh air.
- Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions 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, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Water 7732-18-5	-	-	-
Sodium chlorite 7758-19-2	-	-	-
Sodium bromide 7647-15-6	-	-	-
Potassium chlorate 3811-04-9	-	-	-
Potassium bromate 7758-01-2	-	-	-

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special technical protective measures are necessary.

Skin and body protection No special technical protective measures are necessary.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance	No information available	Odor	No information available
Color	No information available	Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Extremes of temperature and direct sunlight.

Incompatible materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.

Skin contact No data available.

Ingestion No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	-	-	-
Sodium chlorite 7758-19-2	= 165 mg/kg (Rat)	= 107.2 mg/kg (Rabbit)	= 230 mg/m ³ (Rat) 4 h
Sodium bromide 7647-15-6	= 3400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Potassium chlorate 3811-04-9	= 1870 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Potassium bromate 7758-01-2	-	-	-

Information on toxicological effects

Symptoms No information available.

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

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.005 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Water 7732-18-5	-	-	-
Sodium chlorite 7758-19-2	-	100 - 500: 96 h Brachydanio rerio mg/L LC50 static 100: 96 h Lepomis macrochirus mg/L LC50 static 100: 96 h Oncorhynchus mykiss mg/L LC50 static	0.026: 48 h Daphnia magna mg/L EC50 0.25 - 0.33: 48 h Daphnia magna mg/L EC50 Flow through 0.012 - 0.018: 48 h Daphnia magna mg/L EC50 Static
Sodium bromide 7647-15-6	5800 - 24000: 96 h Scenedesmus pannonicus mg/L EC50	24000 - 96000: 96 h Oryzias latipes mg/L LC50 flow-through 24000: 96 h Oryzias latipes mg/L LC50 semi-static 16000 - 24000: 96 h Poecilia reticulata mg/L LC50 flow-through 16000: 96 h Poecilia reticulata mg/L LC50 semi-static 15614 - 17428: 96 h Pimephales promelas mg/L LC50 static 1000: 96 h Lepomis macrochirus mg/L LC50 static 0.054 - 0.081: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1000: 96 h Oncorhynchus mykiss mg/L LC50 static	5800 - 48000: 48 h Daphnia magna mg/L EC50 5700 - 10800: 48 h Daphnia magna mg/L EC50 Static
Potassium chlorate 3811-04-9	-	13500: 96 h Pimephales promelas mg/L LC50 1750: 96 h Oncorhynchus mykiss mg/L LC50	1093: 24 h Daphnia magna mg/L EC50
Potassium bromate 7758-01-2	-	-	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Water 7732-18-5	-	-	-	-
Sodium chlorite 7758-19-2	-	-	-	-
Sodium bromide 7647-15-6	-	-	-	-
Potassium chlorate 3811-04-9	-	-	-	-
Potassium bromate 7758-01-2	-	-	-	-

Chemical Name	California Hazardous Waste Status
Water 7732-18-5	-
Sodium chlorite 7758-19-2	Toxic Ignitable
Sodium bromide 7647-15-6	-
Potassium chlorate 3811-04-9	-
Potassium bromate 7758-01-2	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no.

Not regulated
Final product is not regulated.

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

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Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet