

Clean Front Concentrate

SAFETY DATA SHEET

Preparation Date: 03-May-2018

Revision Date: 03-May-2018

Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name Clean Front Concentrate

Other means of identification

Item#: 4407

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Concentrated iodophor for manufacturing iodine disinfectants, Restricted to professional users

Uses advised against All other

Details of the supplier of the safety data sheet

Supplier DeLaval Cleaning Solutions
11100 N. Congress Ave.
Kansas City, MO 64153
Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3

Sulfuric acid and other mineral acids mist statement

The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric or other strong mineral acids (such as Hydrochloric and Nitric acid) as a known human carcinogen, (IARC category 1). This classification applies only to mists containing such mineral acids and not to the specific acids or their solutions, unless otherwise noted.

Corrosive to metals	Category 1
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Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes severe skin burns and eye damage

May cause cancer

May cause respiratory irritation. May cause drowsiness or dizziness

May be corrosive to metals

**Appearance** Dark brown**Physical state** Liquid**Odor** No information available**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Use only outdoors or in a well-ventilated area
 Keep only in original container

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: 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.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed
 Store in corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight %
Iodine	7553-56-2	20
Hydriodic acid	10034-85-2	1 - 10

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first-aid measures**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Corrosive. The product causes burns of eyes, skin and mucous membranes.

Indication of any immediate medical attention and special treatment needed

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

No information available.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.

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.

NFPA

Health hazards 3

Flammability 1

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperatures between 36°F and 77°F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store in corrosive resistant container with a resistant inner liner.

Incompatible Materials bases, bleach, metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iodine 7553-56-2	TWA: 0.01 ppm STEL: 0.1 ppm	Ceiling: 0.1 ppm Ceiling: 1 mg/m ³	2 ppm

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Goggles.

Skin and body protection Wear protective gloves and protective clothing.

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. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	No information available
Appearance	Dark brown	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	1	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	> 100 °C / > 212 °F	
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	
Specific Gravity	1.32	
Water Solubility	soluble	

Partition coefficient: n-octanol/water	No information available
Autoignition Temperature	No information available
Decomposition temperature	No information available
Viscosity of Product	No information available
Dynamic viscosity	No information available

Other information

Density 11.0 lb/gal

10. STABILITY AND REACTIVITY

Reactivity

May react with other chemicals. Do not mix with other chemicals except as directed on label.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

bases, bleach, metals

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Principal Routes of Exposure

Eye contact, Skin contact, Ingestion, Inhalation

Information on likely routes of exposure**Eyes**

Corrosive to the eyes and may cause severe damage including blindness.

Skin

Corrosive to skin.

Ingestion

Ingestion causes burns of the upper digestive and respiratory tracts.

Inhalation

May cause irritation of respiratory tract.

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

Product is not identified as a sensitizer according to OSHA regulations.

Mutagenic effects

Product is not identified as a mutagen according to OSHA regulations.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Hydriodic acid 10034-85-2	Not Listed	Group 1	Not Listed	Not Listed

*IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans*

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Reproductive Effects**STOT - single exposure**

Product is not identified as having reproductive effects according to OSHA regulations.

Product is not identified as having single target organ toxicity (single exposure) according to OSHA regulations.

STOT - repeated exposure

Product is not identified as having single target organ toxicity (repeated exposure) according to OSHA regulations.

Aspiration Hazard

Product is not identified as an aspiration hazard according to OSHA regulations.

Numerical measures of toxicity

If available, toxicity values of individual components are shown below.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iodine 7553-56-2	14000 mg/Kg	No data available	137 ppm 4.588 mg/L

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

12. ECOLOGICAL INFORMATION**Ecotoxicity**

If available, ecotoxicity values of individual components are shown below.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Iodine 7553-56-2	No data available	LC50 (96 h) 0.53 mg/L	No data available	LC50 (48 h) 0.16 mg/L

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste Disposal Method**

Dispose of in accordance with local regulations. Should not be released into the environment.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION**DOT**

UN-No	3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s (Iodine, Hydriodic acid)
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION**State Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Iodine 7553-56-2	X	X	X
Hydriodic acid 10034-85-2	X	X	X

U.S. EPA Label information

EPA Pesticide registration number 4959-13-82882

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling

requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide label**PRECAUTIONARY STATEMENT:****HAZARDS TO HUMANS AND DOMESTIC ANIMALS.**

DANGER. Corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through skin or inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist. Wear goggles or face shield. Wear protective clothing and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARDS: This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a national Pollutant Discharge Elimination (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

16. OTHER INFORMATION

Preparation Date: 03-May-2018

Revision Date: 03-May-2018

Revision Note: None

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 SDS