



Safety Data Sheet

Section 01 - Identification

Product Identifier	Iodophor 20% Low Foam Solution
Other Means of Identification	None
Product Use and Restrictions on Use	Detergent, sanitizer for professional use.
Initial Supplier Identifier	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
Prepared By	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
24-Hour Emergency Phone	Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification

Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Irritation	Category 1
STOT-Single Exposure	Category 3

Physical Hazards

Corrosive to Metals	Category 1
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Danger

Hazards Statements

H314 – Causes severe skin burns and eye damage.

H335 – May cause respiratory irritation.

H290 – May be corrosive to metals.

Pictograms



Precautionary Statements

P234 – Keep only in original container.

P405 – Store locked up.

P403 + P233 – Store in a well-ventilated place. Keep container tightly closed.

P271 – Use only outdoors or in a well-ventilated area.

P260 – Do not breathe mist, vapours or spray.

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P280 – Wear protective gloves, protective clothing, eye protection, and face protection.

P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P363 – Wash contaminated clothing before reuse.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301 + P330 + P331 – IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P310 – Immediately call a POISON CENTER or doctor/physician.

P390 – Absorb spillage to prevent material damage.

P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Polyethoxy polypropoxy polyethoxy ethanol – iodine complex	26617-87-8	60.0-100.0%	
Phosphoric acid	7664-38-2	3.0-7.0%	

Section 04 - First Aid Measures

Inhalation	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.
Skin Contact / Absorption	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water for 30 minutes. Seek immediate medical attention. Completely decontaminate clothing, shoes and leather goods before reuse or discard.
Eye Contact	Immediately flush eye(s) with lukewarm, gently flowing water for 30 minutes while forcibly holding the eyelids apart to ensure complete irrigation of the eye tissue. If a contact lens is present, remove only if easy to do so. Seek immediate medical attention.
Ingestion	Never give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth with water. DO NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Seek immediate medical attention.
Additional Information	Treat symptomatically. Immediate medical attention is required.

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media	Use extinguishing media suitable for surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.
Unsuitable Extinguishing Media	Some chemical extinguishing agents may react with this material. Use chemical extinguishing agents with caution.
Specific Hazards Arising From the Chemical	Contact with metals may release small amounts of flammable hydrogen gas. Carbon oxides, phosphorus oxides and iodine may form in a fire. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.
Special Protective Equipment and Precautions for Fire-Fighters	Wear NIOSH-approved self-contained breathing apparatus and protective gear.
Further Information	Move containers from fire area if safe to do so. Water spray may be used in cooling equipment exposed to heat and flame.

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.
Environmental Precautions	Prevent product from entering sewers, water ways or confines spaces.
Methods and Materials for Containment and Cleaning Up	Contain and absorb spilled product with non-reactive absorbent and place in a suitable, labelled container for proper disposal. Transfer to large containers and neutralize with soda ash. Contaminated absorbent may pose the same hazards as the spilled product.

Section 07 - Handling and Storage

Precautions for Safe Handling	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Conditions for Safe Storage	Store in a cool, dry, well-ventilated area, away from incompatibles. Inspect periodically for damage or leaks. Store in corrosion-resistant containers. Unsuitable materials for containers: metals.
Incompatibilities	Strong oxidizing agents, strong alkalis, reducing agents, and metals.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Poly Ethoxypropoxy Ethoxyethanol Iodine Complex	ACGIH	TLV-TWA	0.01 ppm (inhalable fraction and vapour as 'Iodine')
	ACGIH	TLV-STEL	0.1 ppm (vapour; aerosol, as 'Iodine')
Phosphoric Acid	OSHA	PEL-TWA	0.1 ppm (ceiling, as 'Iodine')
	ACGIH	TLV-TWA	1 mg/m ³
	ACGIH	TLV-STEL	3 mg/m ³

Engineering Control(s)

Ventilation Requirements	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other	Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.
Hand Protection	Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
Skin and Body Protection	Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Impervious boots of chemically resistant material should be worn at all times. No special footwear is required other than what is mandated at place of work.

Respiratory Protection

If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Advice should be sought from respiratory protection specialists. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02.

Thermal Hazards

Not Available

Section 09 - Physical and Chemical Properties

Appearance

Physical State	Liquid
Colour	Dark brown
Odour	Halogen
Odour Threshold	Not Available

Property

pH	<2 (5% solution)
Melting Point/Freezing Point	<5°C (41°F)
Initial Boiling Point and Boiling Range	>90°C (194°F)
Flash Point	Cleveland open cup
Evaporation Rate	Not Available
Flammability	Not Applicable
Upper Flammable Limit	Not Available
Lower Flammable Limit	Not Available
Vapour Pressure (mm Hg, 20°C)	Not Available
Vapour Density (Air=1)	Not Available
Relative Density	Not Available
Solubility(ies)	Not Available
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	Not Available
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	None

Specific Gravity (Water=1)	1.34
% Volatiles by Volume	<8%
Formula	Mixture
Molecular Weight	Not Available

Section 10 - Stability and Reactivity

Reactivity	Contact with some reactive metals may produce flammable hydrogen gas. May be corrosive to metals. Avoid aluminum alloys, carbon steel, stainless steels, unalloyed cast irons and copper alloys.
Stability	Stable under the recommended storage conditions.
Possibility of Hazardous Reactions	Hazardous polymerization will not occur.
Conditions to Avoid	Heat and open flame.
Incompatible Materials	Strong oxidizing agents, strong alkalis, reducing agents, and metals.
Hazardous Decomposition Products	None known.

Section 11 - Toxicological Information

Acute Toxicity Estimate

Component	Oral LD₅₀	Dermal LD₅₀	Inhalation LC₅₀
Iodophor 20% Low Foam Solution	3.2 g/kg	50 g/kg	Not Available

Chronic Toxicity – Carcinogenicity

Component	IARC
Iodophor 20% Low Foam Solution	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

Skin Corrosion/Irritation	Corrosive. Capable of producing severe burns, blisters, ulcers and permanent scarring.
Ingestion	May cause burns to the mouth, throat, esophagus and stomach; abdominal pain; vomiting; bleeding and eventually death.
Inhalation	May cause severe irritation to the nose, throat and respiratory tract.
Serious Eye Damage/Irritation	Corrosive. Capable of producing serious eye burns and permanent damage, including blindness.
Respiratory or Skin Sensitization	Not Available
Germ Cell Mutagenicity	Not expected to be mutagenic in humans.
Reproductive Toxicity	Not expected to have other reproductive effects.
STOT-Single Exposure	May cause irritation to the respiratory tract.
STOT-Repeated Exposure	Prolonged or repeated exposure to iodine may cause adverse chronic health effects. Symptoms of iodine poisoning may include skin rashes, headache, diarrhea, anemia, bronchitis, general depression and effects on the thyroid.

Aspiration Hazard Not Available

Synergistic Materials None known.

Section 12 – Ecological Information

Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Phosphoric Acid	EC ₅₀ (Pseudokirchneriella subcapitata, 72hr): 32.0mg/L	LC ₅₀ (Oryzias latipes, 96hr): 75.1mg/L	EC ₅₀ (Daphnia magna, 48hr): >376mg/L
Biodegradability	Not Available		
Bioaccumulation	Not Available		
Mobility	Not Available		
Other Adverse Effects	Not Available		

Section 13 – Disposal Considerations

Waste From Residues/Unused Products Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Contaminated Packaging Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 – Transport Information

UN Number	UN3264								
UN Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Poly ethoxypropoxy ethoxyethanol iodine complex)								
Transport Hazard Class(es)	8								
Packaging Group	III								
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.								
Special Precautions	Not Available								
Transport in Bulk	Not Available								
Additional Information	<table><thead><tr><th><u>Packing Group</u></th><th><u>Limited Quantity Index</u></th></tr></thead><tbody><tr><td>I</td><td>0</td></tr><tr><td>II</td><td>1 L</td></tr><tr><td>III</td><td>5 L</td></tr></tbody></table>	<u>Packing Group</u>	<u>Limited Quantity Index</u>	I	0	II	1 L	III	5 L
<u>Packing Group</u>	<u>Limited Quantity Index</u>								
I	0								
II	1 L								
III	5 L								

TDG

Other Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 – Other Information

Preparation Date

March 29, 2016

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution[®] initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA

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