

Safety Data Sheet

Issue Date: 16-Nov-2020

Revision Date: 19-Feb-2021

Version 1

1. IDENTIFICATION

Product identifier

Product Name Fortify Clear

Other means of identification

SDS # RXG-019

Registration Number(s) EPA Reg. No. 88341-8-89112
UN/ID No UN1760

Recommended use of the chemical and restrictions on use

Recommended Use Disinfectant.

Details of the supplier of the safety data sheet

Supplier Address

Rx Green Technologies, LLC
15 Tinker Ave.
Londonderry, NH 03053
Phone: (603) 769-3450 Fax: (603) 769-3450

Emergency telephone number

Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Emergency Overview This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Greenish yellow liquid

Physical state Liquid

Odor Chlorine

Classification

Serious eye damage/eye irritation	Category 2
Corrosive to metals	Category 1

Signal Word

Warning

Hazard statements

Causes serious eye irritation
May be corrosive to metals



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep only in original container

Precautionary Statements - Response

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 advice/attention
 IN CASE OF SPILL: Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store in corrosive resistant container with a resistant inner liner

Other hazards

Toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Chlorine dioxide	10049-04-4	0.3

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice	Take affected persons out into the fresh air. Immediately remove any clothing soiled by the product.
Eye Contact	Protect unharmed eye. Remove contact lenses if worn, if possible.
Skin Contact	Immediately rinse with water. If skin irritation is experienced, consult a doctor.
Inhalation	Supply fresh air; consult doctor in case of complaints. In case of irregular breathing or respiratory arrest provide artificial respiration. Provide oxygen treatment if affected person has difficulty breathing.
Ingestion	Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed

Symptoms	Breathing difficulty. Coughing. Irritant to eyes. Nausea in case of ingestion. Gastric or intestinal disorders when ingested. Danger of impaired breathing. May cause respiratory irritation.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

The product is not flammable. Use fire fighting measures that suit the environment.

Unsuitable Extinguishing Media None.

Specific Hazards Arising from the Chemical

Formation of toxic gases is possible during heating or in case of fire.

Hazardous combustion products Chlorine. Chlorine compounds.

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. Use personal protective equipment as required. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions

Environmental precautions Avoid release to the environment. 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 Clean-Up Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Do not allow product to dry out. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Use only in well-ventilated areas. Prevent formation of aerosols. Protect from sunlight. Do not expose to temperatures exceeding 122°F (50°C).

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a cool location. Store only in the original receptacle. Provide ventilation for receptacles. Store away from food stuffs. Store away from reducing agents. Do not store together with acids. Do not store together with alkaline materials. Prevent from drying out. Photoreactive. Keep receptacle tightly sealed.

Incompatible Materials Acids. Alkalis. Peroxides.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Chlorine dioxide 10049-04-4	Ceiling: 0.1 ppm	TWA: 0.1 ppm TWA: 0.3 mg/m ³ (vacated) TWA: 0.1 ppm (vacated) TWA: 0.3 mg/m ³ (vacated) STEL: 0.3 ppm (vacated) STEL: 0.9 mg/m ³	IDLH: 5 ppm TWA: 0.1 ppm TWA: 0.3 mg/m ³ STEL: 0.3 ppm STEL: 0.9 mg/m ³

Appropriate engineering controls

Engineering Controls Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses.
Skin and Body Protection	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Wear protective work clothing.
Respiratory Protection	Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded. Use suitable respiratory protective device in case of insufficient ventilation. Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable.

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	Odor	Chlorine
Appearance	Greenish yellow liquid	Odor Threshold	Not determined
Color	Greenish yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6.0-8.0	
Melting point / freezing point	0 °C / 32 °F	
Boiling point / boiling range	100 °C / 212 °F	
Flash point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid - Not Applicable	
Flammability Limit in Air		
Upper flammability or explosive limits	Not determined	
Lower flammability or explosive limits	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Product is not self-igniting	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not an explosive	
Oxidizing Properties	Not determined	

Other information

Liquid Density 1.03 g/cm³ (8.595 lbs/gal)

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Contact with acids releases toxic gases. Reacts with peroxides and other radical forming substances. Reacts with reducing agents.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

Acids. Alkalis. Peroxides.

Hazardous decomposition products

Chlorine. Chlorine compounds.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Chlorine dioxide 10049-04-4	= 292 mg/kg (Rat)	-	= 32 ppm (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Please see section 4 of this SDS for symptoms.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Serious eye damage/eye irritation	Causes serious eye irritation.
Carcinogenicity	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50	97,333.30 mg/kg
ATEmix (inhalation-dust/mist)	16.7000 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Chlorine dioxide 10049-04-4		0.021: 96 h Danio rerio mg/L LC50 semi-static	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Not determined

Other Adverse Effects

Not determined

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

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

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	UN1760
Proper Shipping Name	Corrosive liquids, n.o.s. (0.3% chlorine dioxide, stabilized)
Hazard class	8
Packing Group	III

IATA

UN number	UN1760
Proper Shipping Name	Corrosive liquids, n.o.s. (0.3% chlorine dioxide, stabilized)
Transport hazard class(es)	8
Packing Group	III

IMDG

UN number	UN1760
Proper Shipping Name	Corrosive liquids, n.o.s. (0.3% chlorine dioxide, stabilized)
Transport hazard class(es)	8
Packing Group	III
Marine Pollutant	This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Chlorine dioxide	X	ACTIVE	X	X	X	X	X		X

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

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).

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

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)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Chlorine dioxide 10049-04-4	X	X	X

EPA Pesticide Registration Number EPA Reg. No. 88341-8-89112

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

XXX

Difference between SDS and EPA pesticide label

XXX

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	1	0	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical hazards	Personal Protection
	1	0	0	Not determined

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Revision Note: New format

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