



VIRWITE LIQUID (SERIES 200)

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and according to the Hazardous Products Regulation (February 11, 2015).
Revision Date: 05/25/16 Date of issue: 05/03/15

Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: VIRWITE LIQUID (SERIES 200)

Product Code: VIRWITE; This SDS applies to Chemtrade's VIRWITE Liquid (Series 200) Sodium Dithionite products using a one or two letter prefix (A through Z) followed by a 3 digit numeric code (200 – 299) ending with the letter "L" OR "DL". For Example - VIRWITE® K-223DL; VIRWITE® S-224L; or VIRWITE® AZ-299L

Synonyms: Sodium Dithionite; Liquid Hydro; Sodium Sulfoxylate; Dithionous Acid; Disodium Salt

Intended Use of the Product

Reducing agent

Name, Address, and Telephone of the Responsible Party

Manufacturer

CHEMTRADE LOGISTICS INC.
155 Gordon Baker Road
Suite 300
Toronto, Ontario M2H 3N5
For MSDS Info: (416) 496-5856
www.chemtradelogistics.com

Emergency Telephone Number

Emergency Number : Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300
Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US/CA)

Acute Tox. 4 (Oral) H302
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Aquatic Acute 3 H402
Aquatic Chronic 3 H412

Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA) :



GHS07

Signal Word (GHS-US/CA) : Warning

Hazard Statements (GHS-US/CA) : H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-US/CA) : P264 - Wash exposed areas. thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - If swallowed: Call a poison center/doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see Section 4).
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Not available

Unknown Acute Toxicity (GHS-US/CA) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	GHS Ingredient Classification
Water	(CAS No.) 7732-18-5	>= 50	Not classified
Sodium Dithionite	(CAS No.) 7775-14-6	10 - 30	Self-heat. 1, H251 Acute Tox. 4 (Oral), H302 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Alkali Metal Hydroxide	(CAS No.) Proprietary	0 - 2	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Alkali Sodium Salt	(CAS No.) Proprietary	0 - 4	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Carbonate Salt	(CAS No.) Proprietary	0 - 4	Eye Irrit. 2A, H319
Polyprotic acid	(CAS No.) Proprietary	0 - 4	Comb. Dust, H232 Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Acute 3, H402

An exemption was claimed under the Canadian Hazardous Materials Information Review Act. The registry number assigned to the claim is 9975. The filing date for the exemption was April 29, 2016 for those ingredients indicated.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell.

Most Important Symptoms and Effects Both Acute and Delayed

General: Harmful if swallowed. Eye irritation. Causes skin irritation. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

Inhalation: Inhalation of vapors may cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: Swallowing a small quantity of this material will result in serious health hazard.

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Chronic Symptoms: Not available

Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical, carbon dioxide, foam, water spray. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use water jet. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Not available

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Sulfur dioxide is major decomposition product. Thermal decomposition products may also include hydrogen sulfide, sodium oxide, oxides of carbon and potentially sulfur.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not allow product to spread into the environment.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Do not take up in combustible material such as: saw dust or cellulosic material.

Methods for Cleaning Up: Collect spillage. Clear up spills immediately and dispose of waste safely.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Do not eat, drink or smoke when using this product. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store away from other materials.

Incompatible Materials: strong acids. Strong oxidizers.

Storage Temperature: 2 - 7 °C (35 - 45 °F) under nitrogen atmosphere

Storage Area: Keep/Store away from extremely high or low temperatures, incompatibles and direct sunlight. Store away from heat.

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Specific End Use(s) Not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Alkali Metal Hydroxide		
Mexico	OEL Ceiling (mg/m ³)	2 mg/m ³
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
USA IDLH	US IDLH (mg/m ³)	10 mg/m ³
Alberta	OEL Ceiling (mg/m ³)	2 mg/m ³
British Columbia	OEL Ceiling (mg/m ³)	2 mg/m ³
Manitoba	OEL Ceiling (mg/m ³)	2 mg/m ³
New Brunswick	OEL Ceiling (mg/m ³)	2 mg/m ³
Newfoundland & Labrador	OEL Ceiling (mg/m ³)	2 mg/m ³
Nova Scotia	OEL Ceiling (mg/m ³)	2 mg/m ³
Nunavut	OEL Ceiling (mg/m ³)	2 mg/m ³
Northwest Territories	OEL Ceiling (mg/m ³)	2 mg/m ³
Ontario	OEL Ceiling (mg/m ³)	2 mg/m ³
Prince Edward Island	OEL Ceiling (mg/m ³)	2 mg/m ³
Québec	PLAFOND (mg/m ³)	2 mg/m ³
Saskatchewan	OEL Ceiling (mg/m ³)	2 mg/m ³
Yukon	OEL Ceiling (mg/m ³)	2 mg/m ³

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective goggles. Protective clothing.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear
Odor	: Slight pungent
Odor Threshold	: Not available
pH	: 10 - 13.5
Melting Point	: Not available
Freezing Point	: < 0 (32 °F)
Boiling Point	: > 100 °C (>212 °F) (212.00 °F)
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available

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Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.12 - 1.18
Solubility	: Water: Miscible
Partition Coefficient: N-octanol/water	: < -2.75 - -4.7 Log Pow (estimated) – for Sodium Dithionite
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Product is stable.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Sparks, heat, open flame and other sources of ignition. Extremely high or low temperatures.

Incompatible Materials: Strong oxidizers. Strong acid. Peroxides. In contact with air, mixing Sodium Dithionite solutions with polysulfide or sulfide containing products may liberate potentially lethal Hydrogen Sulfide gas. Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: On heating: release of toxic and corrosive gases/vapors sulphur oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Harmful if swallowed.

LD50 and LC50 Data:

VIRWITE LIQUID (SERIES 200)	
ATE US/CA (oral)	500.00 mg/kg body weight

Skin Corrosion/Irritation: Causes skin irritation.

pH: 10 - 13.5

Serious Eye Damage/Irritation: Causes serious eye irritation.

pH: 10 - 13.5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Potential Adverse Human Health Effects and Symptoms: Harmful if swallowed.

Symptoms/Injuries After Inhalation: Inhalation of vapors may cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Causes skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation.

Symptoms/Injuries After Ingestion: Swallowing a small quantity of this material will result in serious health hazard.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium Dithionite	
LD50 Oral Rat	2500 mg/kg
LD50 Dermal Rat	> 2000

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Carbonate Salt	
LD50 Oral Rat	4090 mg/kg
LC50 Inhalation Rat (mg/l)	2300 mg/m ³ (Exposure time: 2 h)
Polyprotic acid	
LD50 Oral Rat	1700 mg/kg
Alkali Sodium Salt	
LD50 Oral Rat	2610 mg/kg
LC50 Inhalation Rat (mg/l)	> 5.5 mg/l (Exposure time: 4h)

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects.

Sodium Dithionite	
LC50 Fish 1	62.3 mg/l (Species :Leuciscus idus)
EC50 Daphnia 1	98 mg/l (Exposure time: 48 h - Species: Daphnia magna Straus)
Carbonate Salt	
LC50 Fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	310 - 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Alkali Metal Hydroxide	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l
Alkali Sodium Salt	
LC50 Fish 1	660 mg/l (Exposure time: 96 h - Species: Gambusia affinis (Mosquito fish))
Polyprotic acid	
LC50 Fish 1	34 - 62 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	113 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	44.2 - 76.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Persistence and Degradability

VIRWITE LIQUID (SERIES 200)	
Persistence and Degradability	Not established. May cause long-term adverse effects in the environment.

Bioaccumulative Potential

VIRWITE LIQUID (SERIES 200)	
Bioaccumulative Potential	Not established.
Carbonate Salt	
BCF Fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

- 14.1 In Accordance with DOT** Not regulated for transport
14.2 In Accordance with IMDG Not regulated for transport
14.3 In Accordance with IATA Not regulated for transport
14.4 In Accordance with TDG Not regulated for transport

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SECTION 15: REGULATORY INFORMATION

US Federal Regulations

VIRWITE LIQUID (SERIES 200)

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard

Sodium Dithionite

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Alkali Metal Hydroxide

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Carbonate Salt

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Alkali Sodium Salt

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Polyprotic acid

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

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Sodium Dithionite

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Alkali Metal Hydroxide

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Polyprotic acid

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

VIRWITE LIQUID (SERIES 200)

Sodium Dithionite

Listed on the Canadian DSL (Domestic Substances List)

Alkali Metal Hydroxide

Listed on the Canadian DSL (Domestic Substances List)

Carbonate Salt

Listed on the Canadian DSL (Domestic Substances List)

Alkali Sodium Salt

Listed on the Canadian DSL (Domestic Substances List)

Polyprotic acid

Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 05/25/16

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Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Self-heat. 1	Self-heating substances and mixtures Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
H232	May form combustible dust concentrations in air
H251	Self-heating: may catch fire
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

Party Responsible for the Preparation of This Document

CHEMTRADE LOGISTICS, INC.

For SDS Info: (416) 496-5856

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.



Chemtrade North America SDS Template