SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL PRODUCT INFORMATION

Product Name	:	LPD-CHLOR
CAS #	:	7757-83-7
Chemical Name	:	Sodium sulfite
Chemical Formula	:	Na_2SO_3
Synonym	:	Disodium sulfite
Product Use	:	Dechlorinating agent for water and wastewater
Original Issue Date	:	October 15, 1995
Previous Revision Date	:	January 1, 2012
Revision Date	:	December 3, 2014

MANUFACTURER INFORMATION

Company Name	:	Severn Trent Services (Exceltec International Corporation)
Street Address	:	1110 Industrial Boulevard
City, State, Zip, Country	:	Sugar Land, Texas 77478, USA
Office Phone Number	:	1-281-240-6770 Toll Free: 1-800-621-9189

24-HR EMERGENCY TELEPHONE NUMBER

CHEMTREC	:	US: 1-800-424-9300 International: 1-703-527-3887

LEGEND – HMIS/NFPA	
Severe Hazards or Risks	4
Serious Hazards or Risks	3
Moderate Hazards or Risks	2
Slight Hazards or Risk	1
Minimal Hazards or Risks	0

HMIS Classification

PPE Supplied by user, dependent on local conditions.

NFPA Classification

Health	2
Fire	0
Reactivity	1
Spceific Hazards	None

SECTION 2: HAZARD(S) IDENTIFICATION

Appearance & Odor	:	Pale green solid tablet with slight sulfur odor.
Emergency Overview	:	Harmful if swallowed. Irritating to eyes. May cause sensitization by inhalation. Reaction with acids form toxic and irritating sulfur dioxide gas. Hazardous decomposition products formed under fire conditions.

Potential Acute Health Effects

Inhalation	:	Dust or mist causes irritation to the respiratory tract. Breathing of dust may aggravate asthma or other pulmonary diseases. Symptoms: headache, breathing difficulties, loss of consciousness and cardiopulmonary arrest.
Ingestion	:	Ingestion may irritate the gastrointestinal tract. Estimated to be moderately toxic. May cause severe allergic reactions in some asthmatics. Large doses may cause violent colic and diarrhea, central nervous depression, and even death.
Eye Contact	:	Dust or mist may irritate or burn the eyes. Solutions will cause irritation or burns to the eyes.
Skin Contact	:	Dust or mist may cause skin irritation from prolonged contact. Solutions will cause skin irritation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Molecular Formula	Molecular Weight	% of Mixture	CAS #
Sodium sulfite	Na_2SO_3	126.043 gm/mol	81.3	7757-83-7

Note: Inert Ingredients 18.7%.

SECTION 4: FIRST AID MEASURES

Eyes : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention if difficulties persist.

Skin : Remove contaminated clothing and footwear. Wash with plenty of soap and water. Clothing and footwear should be decontaminated before reuse. Seek medical attention if irritation occurs or persists.

Inhalation : Remove victim out of contaminated area to fresh air. If breathing is stopped or irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.

Ingestion : If victim is conscious, immediately give a large quantity of water or milk and induce vomiting. Seek medical attention immediately.
If victim is unconscious or in convulsions, do not give anything by mouth. Seek medical attention immediately.

Notes to Physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability of the Product : Not flammable.

Auto-ignition Temperature : Not applicable.

Upper Flammable Limit : Not applicable.

Lower Flammable Limit : Not applicable.

Fire Extinguishing Media : Material is not flammable. Use extinguishing media appropriate for material in surrounding fire.

Special Fire Fighting Procedures Fire-fighters should wear appropriate personal protective equipment (PPE) and NIOSH-approved self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Use water-spray to keep containers cool and to knock down fumes.

Unusual Hazard Information : At 1112°F (600°C) sodium sulfite is formed; at 1652°F (900°C) sulfur dioxide is formed.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Leak / Spill : LPD-CHLOR is not a regulated product. However, in the event of a spill, wear appropriate protective rubber gloves and boots. Use chemical splash goggles and breathing apparatus if necessary. Collect all spilled material and place in suitable containers for disposal.

Waste Disposal Methods : LPD-CHLOR is not rated as a hazardous substance by the EPA. Unused material is not rated as a hazardous waste by RCRA. Solid waste can be buried at a licensed waste disposal facility. Collected material can be dissolved in water, using caution as solution may get hot. Neutralize with acid and dispose through wastewater treatment plant (WWTP). Prior

SECTION 6: ACCIDENTAL RELEASE MEASURES

approval from plant personnel as well as Local, State and Federal environmental agencies should be obtained before disposal to WWTP. Good ventilation is necessary during neutralization due to release of sulfur dioxide gas.

Environmental Precautions : Prevent waste entry into drains, water courses or the soil. File environmental spill notifications if necessary.

SECTION 7: HANDLING AND STORAGE

Handling Procedures : Wear appropriate personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not eat or drink in the work area. Keep away from incompatibles such as oxidizing agents, and acids.

Storage Requirements : Keep product dry and in a tightly closed container when not in use. Store in cool, dry, well-ventilated area, keeping it away from heat sources and/or open flames.

For best results, product should not be stored at temperatures in excess of 80°F.

Keep in original container. DO NOT store/transfer/repack this product in any other container without the approval/authorization of Severn Trent Services, Inc.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines :

General Product Information : No exposure limits have been established.

Component Exposure Limits : ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

Other Exposure Limits for Potential Decomposition Products: : Sulfur dioxide:

NIOSH REL : TWA 2 ppm (5 mg/m^3)
STEL 5 ppm (13 mg/m^3)

OSHA PEL : TWA 5 ppm (13 mg/m^3)

ACGIH STEL : TLV 0.25 ppm (0.65 mg/m^3)

Protective Equipment

Eyes and Face : Chemical splash goggles and face shield.

Hands : Chemical-resistant, impervious gloves (nitrile, neoprene, butyl rubber) should be worn at all times.

Respiratory Protection : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with NIOSH standard. NIOSH approved dust mask is essential where dusting may occur.

Other Clothing and Equipment : Boots, aprons, or chemical suits should be used when necessary to prevent skin contact. Personal protective clothing and use of equipment must be in accordance with 29 CFR 1910.132 (general requirement), .133 (eye and face protection), and .138 (hand protection).

Engineering Controls

Ventilation Requirements : Ensure adequate ventilation. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated or if there is a release of sulfur dioxide gas.

Other : Emergency shower and eyewash are recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Dry Solid Tablet.
Color	:	Pale green solid tablet.
Odor	:	Slight sulfur odor; pine fragrance added.
Boiling/condensation point	:	Not applicable.
Flammability properties	:	The product is not flammable.
Oxidizing properties	:	Non-oxidizer, oxygen scavenger.
Decomposition temperature	:	900°C (1652°F)
Specific gravity of tablet	:	2.0 min. (H_2O = 1)
pH of solution	:	Alkaline.
Vapor pressure	:	Not applicable.
Vapor density (air = 1)	:	Not applicable.
Percent volatile by volume	:	Not applicable.
Solubility in water	:	22% by weight at 80°F (or 26°C).
Bulk density	:	125 lbs/ft^3 (2.0 g/cm^3).

Note: Exposure to acids will release SO_2 gas.

SECTION 10: STABILITY AND REACTIVITY

Stability	:	Stable under recommended storage conditions. Product decomposes at approximately 900°C (1652°F) releasing sulfur dioxide gas and hazardous residue.
Incompatibility (materials to avoid)	:	Strong oxidizers: causes vigorous exothermic reactions. Acids: release sulfur dioxide gas.
Hazardous Decomposition or By-products	:	Sulfur dioxide, Sulfur oxide, and Sodium sulfide residue. Sulfur dioxide is toxic, corrosive and an oxidizer. Sodium sulfide residue is flammable and a strong irritant to skin.
Hazardous Polymerization	:	This product is not known to polymerize.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	:	LD50 (oral, mouse): 820 mg/kg LD50 (oral, rat): >2,000 mg/kg LC50 (inhalation, rat): >5.5 mg/L/4 hrs LC50 (inhalation, rat): >22 mg/L/1 hr
Irritation/Corrosion		
Skin & Eyes	:	Causes skin and eyes irritation.
Sensitization	:	Not available.
Delayed (Subchronic and Chronic) Effects	:	Sodium sulfite has been demonstrated to be mutagenic in microbial systems; however, it is not mutagenic in studies involving insects and is not considered to present a mutagenic threat to multicell organisms.
Remarks	:	Harmful if swallowed. Moderate eye irritation. May cause sensitization of susceptible persons by inhalation of aerosol or dust.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity Effects : The following Ecotoxicity data is available for Sodium sulfite.

Carassius auratus (goldfish), LD50, 96 hrs	100 mg/L
Daphnia magna, LC50, 48 hrs	440 mg/L
Western Mosquitofish, LC50, 96 hrs	460 mg/L
Biochemical Oxygen Demand (BOD)	0.12 lb/lb, instantaneous

Mobility : No data available.
Persistence and degradability : No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA

Is the unused product a RCRA hazardous waste if discarded? : No

If yes, the RCRA ID number is : Not applicable.

Waste disposal considerations : The generation of waste should be avoided or minimized whenever possible. Follow "Leak and Spill Procedures" outlined in Section 6 of this SDS for neutralizing material before disposal. Disposal of material and its container must be in accordance with applicable federal, state, and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION for additional handling and protection of employees.

SECTION 14: TRANSPORT INFORMATION

US DOT Hazard Class : Not regulated.
US DOT ID Number : Not applicable.
Proper Shipping Name : Not applicable.

For additional information on shipping regulations affecting this product, contact the information number provided in Section 1.

SECTION 15: REGULATORY INFORMATION

Inventory Status :

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	AICS	Yes
Canada	DSL	Yes
China	IECSC	Yes
Europe	EINECS	Yes
Japan	ENCS	Yes
Korea	ECL	Yes
Philippines	PICCS	Yes
United States & Puerto Rico	TSCA 8(b)	Yes

Note: A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

US Federal Regulations : None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

SARA 302 (EHS TPQ) : There are no specific Threshold Planning Quantities for Sodium sulfite. The default Federal MSDS Submission and inventory requirement filling threshold of 10,000 lbs (4,500 kg) therefore, applies, per 40 CFR 370.20.

SARA 311/312 MSDS Distribution : Chemical Inventory – Hazard Identification: Sodium sulfite
Acute (Immediate) Hazard – Yes
Chronic (Delayed) Hazard – Yes
Fire Hazard – No
Reactivity Hazard – No
Pressure Hazard- No

Clean Air Act : Not available.

Clean Water Act : Not available.

Canadian Federal Regulations	:	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
WHMIS Classification	:	Class D Division 2 Subdivision B – Toxic material causing other toxic effects.
European Regulations	:	European Labeling in Accordance with EC Directives
Risk Phrases	:	This product is not classified according to EU legislation.

SECTION 16: OTHER INFORMATION

Key to Abbreviations

ACGIH	American Conference of Industrial Hygienists
AICS	Australia Inventory of Chemical Substances
CAS	Chemical Abstracts Service Registry Number
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DSL	Domestic Substance List
EC	European Commission
EINECS	European Chemical Substances Information System
ENCS	Existing and New Chemical Substances
EU	European Union
IECSC	Inventory of Existing Chemical Substances in China
LC50	Lethal Concentration. It is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals.
LD50	Lethal Dosage. It is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
OECD	Organization for Economic Cooperation and Development
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PPE	Personal Protective Equipment
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act
SCBA	Self-contained Breathing Apparatus
SDS	Safety Data Sheet
STEL	Short Term Exposure Limit (15 minutes)
TLV	Threshold Limit Value
TPQ	Threshold Planning Quantity
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average (8 hours)
US DOT	United States Department of Transportation
WHMIS	Workplace Hazardous Information System

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