

MATERIAL SAFETY DATA SHEET



Health Emergencies: CHEMTREC® 1-800-424-9300

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Manufacturer: Nisus Corporation
100 Nisus Drive
Rockford, TN 37853
800-264-0870 FAX: 865-577-5825

Trade Name: Nisus DSV™
EPA Registration No. 10324-80-64405
Chemical Family: Quaternary Ammonium Compound

Section 2: INGREDIENTS INFORMATION

	Weight %
Alkyl (C ₁₂ -C ₁₆) dimethyl benzyl ammonium chloride (CAS 68424-85-1)	2.200%
Octyl decyl dimethyl ammonium chloride (CAS 32426-11-2)	1.650%
Dioctyl dimethyl ammonium chloride (CAS 5538-94-3)	0.825%
Didecyl dimethyl ammonium chloride (CAS 7173-51-5)	0.825%
Ethanol (CAS 64-17-5)	<1%

Section 3: HEALTH HAZARD INFORMATION

EMERGENCY OVERVIEW: Clear, colorless to straw colored liquid. Corrosive to the eyes, skin, gastrointestinal tract, and respiratory system.

SKIN: Causes corrosive burns. Brief exposures may cause irritation and defatting of the skin. Exposures not promptly washed off may lead to toxic effects similar to ingestion. Harmful if absorbed through skin.

EYES: Causes burns and may result in permanent injury to eyes including blindness.

INHALATION: Irritation of mucous membrane can be caused by solvent vapors or mists of products.

INGESTION: Mists and vapors can irritate the throat and respiratory tract. High vapor concentrations may cause central nervous system effects. Symptoms may include headaches, dizziness, and drowsiness. Harmful if inhaled.

CHRONIC: Ingestion of ethanol by pregnant women can cause reproductive toxicity to the fetus.

Section 4: EMERGENCY AND FIRST AID PROCEDURES

EYES: Immediately flush eyes with water for 15-20 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention at once.

SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

INHALATION: If symptoms are experienced, move victim to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

Section 5: FIRE & EXPLOSION DATA

Flash Point: Over 201°F (94°C)

Upper & Lower Flame Limits: Not Determined

Extinguishing Media: Dry chemical, foam, carbon dioxide or water fog. Solid water streams may spread burning liquid.

Special Fire Fighting Procedures: Firefighters should wear full protective clothing including self-contained breathing apparatus. Cool fire exposed containers with spray

Hazardous Combustion Products: Irritating and toxic gases or fumes may be released during a fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES

EMERGENCY ACTION: Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas where vapors may accumulate. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).

SPILL CLEANUP: Ventilate closed spaces before entering. All equipment used when handling the product must be grounded. Floor will be slippery. Do not touch or walk through spilled material. Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.

LARGE SPILLS: Dike far ahead of liquid spill for later disposal. Water spray may reduce vapor but will increase foaming. Water may not prevent ignition in closed spaces.

SECTION 7: HANDLING AND STORAGE

HANDLING PROCEDURES: Avoid contact with skin and eyes. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water.

STORAGE PROCEDURES: Keep the container tightly closed and in a cool, well-ventilated place. Keep from freezing. Do not handle or store near an open flame, heat or other sources of ignition. Prevent electrostatic charge buildup by using common bonding and grounding techniques.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

VENTILATION TYPE: Mechanical (Explosion proof)

RESPIRATORY: None required if good ventilation is maintained. For mist or vapor wear NIOSH Approved respirator.

PROTECTIVE GLOVES: Rubber or Neoprene

EYE PROTECTION: Splash proof safety goggles

OTHER EQUIPMENT: Impervious apron, eyewash facility, emergency shower, face shield

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: ND

pH: 12.4

PERCENT VOLATILE (by weight): ND

EVAPORATION RATE: ND (Butyl Acetate=1)

SOLUBILITY IN WATER: Soluble

VAPOR PRESSURE: ND

APPEARANCE/ODOR: Colorless to light straw in color; benzaldehyde odor

DENSITY: 8.4 lbs./gallon (H₂O = 1)

Section 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Keep away from heat and strong oxidizing agents.

INCOMPATIBILITY: Strong oxidizers or reducing agents

HAZARDOUS POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic hydrogen chloride fumes, oxides of carbon and nitrogen.

Section 11: TOXICOLOGICAL INFORMATION

CARCINOGENITY: No Carcinogenity data available for this product.
ACUTE ORAL LD₅₀ - 2.72g/kg in rats
ACUTE DERMAL – Greater than 2g/kg body weight
PRIMARY SKIN – Corrosive
PRIMARY EYE – Corrosive

Section 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Very Toxic to aquatic organisms.
ENVIRONMENTAL FATE: This product is biodegradable.

Section 13: DISPOSAL CONSIDERATION

WASTE DISPOSAL: Incinerate. Make sure that all federal, state and local regulations are observed.

SECTION 14 – TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Disinfectants Liquid Corrosive, NOS (Quaternary Ammonium Compound), 8, UN1903, PG III
DOT HAZARD CLASS: 8 Corrosive
EXEMPTION: This product can ship as a "Consumer Commodity" and be re-classed as "ORM-D" if packaged in < 1.3 gallons (5.0 Liter) containers. (Non Hazardous)
STATE & PROVINCIAL RIGHT TO KNOW & SELECTED REGULATORY LISTS: The following ingredients appear on various state right to know lists and/or California's Proposition 65 List:

Chemical Name	State List
Ethanol	AZ, CA, CT, FL, ID, MA, MN, NJ, PA, RI
Benzyl Chloride (trace impurity <10ppm)	AZ, CA, CAP65C, FL, IL, MA, MN, NJ, PA

WHMIS CLASSIFICATION: B3, E, D1B

Section 15: REGULATORY INFORMATION

TSCA STATUS: While all ingredients are listed on the TSCA Chemical Inventory, this product is regulated as a pesticide under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and not subject to the TSCA Inventory rules for FIFRA uses.

OTHER CHEMICAL INVENTORIES: All components of this product are listed on the following inventories: Canada (DSL), European Union, China, Korean and Philippines. One or more ingredients are not listed on the following inventories: Australia and Japan.

CERSL/SARA: SARA TITLE III, SECTIONS 311/312 – This act requires reporting under the Community Right-to-Know provisions due to the inclusion of the following components of this material in one or more of the five hazard categories listed in the 40 CFR 370:

Classification Of This Product: IMMEDIATE, FIRE

HAZARD RATING	HMIS	NFPA
Health	3	3
Flammability	0	0
Reactivity	0	0
PPE	B	

Section 16: OTHER INFORMATION**Warranty Disclaimer**

The information, data and recommendations contained herein are believed to be accurate but may not be all inclusive and should only be used as a guide. The information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the product for his particular use and on condition that they assume the risk of the use thereof. With respect to this publication and the product related thereto, unless otherwise expressly provided by Manufacturer in writing, **MANUFACTURER MAKES NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

Remedy/Liability Limits

The exclusive remedy for losses or damages resulting from this publication or the related product (including claims based on contract, negligence, strict liability or other legal theories) shall be limited to, at Manufacturer's sole election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

Manufacturer shall not be liable for losses or damages resulting from use of this publication or handling or use of this product, **IN NO CASE SHALL MANUFACTURER BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OR LOSSES, INCLUDING WITHOUT LIMIT, HEALTH RELATED DAMAGES OR INJURIES.**

The terms of this **Warranty Disclaimer** and **Remedy/Liability Limits** cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Manufacturer or the seller is authorized to vary or exceed the terms of this **Warranty Disclaimer** or **Limitation of Remedies** in any manner.



100 Nisus Drive • Rockford, TN 37853 USA • (800) 264-0870

Nisus DSV and Nisus Corporation are trademarks or registered trademarks of Nisus Corporation. ©2014 Nisus Corporation • #DSV-MSDS-1114