



**Product Name:** NAVA Algaecide 10  
**Date:** 9/28/2018

**SECTION 1 IDENTIFICATION**

**Supplier:** NAVA Water Products  
95 MacCorkle Avenue SW  
South Charleston, WV 25303  
Tel: 1-800-811-2327

**Emergency Telephone:** **Medical** (800) 420-9236; **Chemtrec:** (800) 424-9300  
**Product Name:** **NAVA Algaecide 10**  
**Synonyms:** Benzalkonium chloride; N-Benzyl-N,N-dimethyltetradecan-1-aminium chloride  
**Chemical Name:** Alkyl dimethyl benzyl ammonium chloride (C<sub>12-18</sub>)  
**Chemical Formula:** C<sub>23</sub>H<sub>42</sub>ClN  
**CAS Number:** 68391-01-5  
**Product Use:** Pool Algaecide

**SECTION 2 HAZARDS IDENTIFICATION**

**Emergency Overview**

**Danger**  
Corrosive



**Hazard Statement(s)**

- H226: Flammable liquid.
- H302: Harmful if swallowed
- H312: Harmful in contact with skin
- H318: Causes serious eye damage
- H401: Toxic to aquatic life

**Precautionary Statement(s)**

- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P262: Do not get in eyes, on skin, or on clothing.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P264: Wash thoroughly with soap and water after handling.
- P273: Avoid release to the environment.
  
- P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 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+P310+P330+P331: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. Do NOT induce vomiting.
- P310: Immediately call a POISON CENTER/doctor
- P362+364: Take off contaminated clothing and wash it before reuse.



**SECTION 2 HAZARDS IDENTIFICATION - Continued**

**Potential Health Effects**

**Skin:** Causes corrosive burns. Brief exposures may cause irritation and defatting of the skin.

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

**Ingestion:** Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Inhalation:** 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.

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS Number</u>	<u>Percent</u>
Alkyl dimethyl benzyl ammonium chloride (C <sub>12-18</sub> )	68391-01-5	9.96%
Dialkyl methyl benzyl ammonium chloride (C <sub>12-18</sub> )	73049-75-9	0.04%
Isopropanol	67-63-0	2.0%

**SECTION 4 FIRST-AID MEASURES**

**Eyes:** Immediately flush eyes with water for at least 15 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. Give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further 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 FIGHTING MEASURES**

**Flash Point:** 120°F (48.8°C) - Pensky Martin Closed Cup

**Upper & Lower Flame Limits:** Not Determined

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

**Fire Fighting Equipment & Instructions:** 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.

**Unusual Fire Explosion Hazards:** Explosive mixtures can form with air. Combustion products are toxic. Solvent vapors can travel to an ignition source and flash back.



**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 CONTROL/PERSONAL PROTECTION**

**Engineering Controls:** Use general ventilation. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

**Personal Protective Equipment**

**Eyes/Face:** Wear chemical goggles. Use a face shield if splashing is possible.

**Skin:** Use impervious gloves (rubber or neoprene). Wear suitable protective clothing.

**Respiratory:** If exposure limits are exceeded or if irritation is experienced, NIOSH approved respiratory protection should be worn. Ventilation and other forms of engineering controls are often the preferred means for controlling chemical exposures. Respiratory protection may be needed for non-routine or emergency situations.

**General:** Eye wash fountain and emergency showers are recommended.

**The following ingredients have established exposure guidelines:**

Ingredient	Exposure Guideline	Guideline Value
Isopropanol – 67-63-0	ACGIH TWA (2002)	400 ppm (TWA), 500 ppm (STEL)
	Intended change listed in 2002 booklet	200 ppm (TWA), 400 ppm (STEL)
	NIOSH Pocket Guide	400 ppm (TWA), 500 ppm (STEL)
	Alberta, British Columbia, Manitoba, New Brunswick, Ontario, Quebec, Yukon (Canada)	400 ppm (TWA), 500 ppm (STEL)
	Saskatchewan (Canada)	983 mg/m <sup>3</sup> (TWA), 1230 mg/m <sup>3</sup> (STEL)
	Mexico – Instruction No. 10	400 ppm (TWA), 500 ppm (STEL)

All TWAS are for an 8-hour period and all STELs are for 15 minutes unless specifically noted as being for another time period.



**SECTION 9      *PHYSICAL AND CHEMICAL PROPERTIES***

<b>Appearance:</b>	Colorless to straw colored liquid
<b>Odor:</b>	Benzaldehyde (organic) odor
<b>pH:</b>	6-9 for 10% Aqueous Solution
<b>Flash Point:</b>	120°F (48.8°C) - Pensky Martin Closed Cup
<b>Specific Gravity (H<sub>2</sub>O=1):</b>	0.95 (8 lbs/gal)
<b>Percent Volatile (by wt.):</b>	50% (weight %)
<b>Vapor Pressure:</b>	24 mmHg
<b>VOC Content:</b>	Not determined
<b>Vapor Density:</b>	Not determined
<b>Viscosity:</b>	75Cst cps @ 25°C
<b>Evaporation Rate:</b>	Not determined.
<b>Solubility in Water:</b>	Soluble

**SECTION 10      *STABILITY AND REACTIVITY***

**Chemical Stability:** Material is stable.

**Conditions to Avoid:** Keep away from heat and strong oxidizing agents.

**Incompatibilities:** Strong oxidizing agents (may result in fire.), reducing agents.

**Hazardous Decomposition:** Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons.

**Hazardous Polymerization:** Will not occur.

**SECTION 11      *TOXICOLOGICAL INFORMATION***

**Carcinogenicity:** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Acute Oral LD50:** 760 mg/kg

**Acute Dermal:** > 1700 mg/kg.

**Primary Skin:** Corrosive

**Primary Eye:** Corrosive

**Carcinogenicity:** No ingredients listed are considered potential or known carcinogens.

**SECTION 12      *ECOLOGICAL INFORMATION***

**Ecotoxicity:** Very Toxic to aquatic organisms. Information available upon request. Please contact Mason Chemical Company Technical Service Department.

**Environmental Fate:** This product is biodegradable

SECTION 13 **DISPOSAL CONSIDERATIONS**

**Disposal Instructions**

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. In addition, plastic containers may be disposed of by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

SECTION 14 **TRANSPORT INFORMATION**



**DOT:** **UN Number:** 2920  
**UN Proper Shipping Name:** Corrosive Liquids, Flammable, N.O.S., (Quaternary Ammonium Compound, Isopropanol)  
**Transport Hazard Class:** 8(3)  
**Packing Group:** II

**TDG:** **UN Number:** 2920  
**UN Proper Shipping Name:** Corrosive Liquids, Flammable, N.O.S., (Quaternary Ammonium Compound, Isopropanol)  
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**MEX:** **UN Number:** 2920  
**UN Proper Shipping Name:** Corrosive Liquids, Flammable, N.O.S., (Quaternary Ammonium Compound, Isopropanol)  
**Transport Hazard Class:** 8(3)  
**Packing Group:** II

**IATA:** **UN Number:** 2920  
**UN Proper Shipping Name:** Corrosive Liquids, Flammable, N.O.S., (Quaternary Ammonium Compound, Isopropanol)  
**Transport Hazard Class:** 8(3)  
**Packing Group:** II

SECTION 15 **REGULATORY INFORMATION**

**TSCA Status:** This product is an EPA registered pesticide, and is therefore excluded from United States TSCA Regulations. EPA Reg. No. 10324-15-75217

**Other Chemical Inventories:** All components of this product are listed on the following inventories: European Union, China. One or more ingredients not found on inventories of Australia, Canada (DSL), Japan and Korea, and Philippines.



SECTION 15 **REGULATORY INFORMATION - Continued**

**CERCLA/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

**SARA Title 313** – This requires submission of annual reports of releases of the following components of this material if the threshold reporting quantities, as listed in 40 CFR 372, are met or exceeded:

Chemical Name	CAS No.	Maximum Concentration	Comment
Isopropanol	67-63-0	10	Isopropanol listing only for strong acid process but no supplier notification required.

**Reportable Quantities/Threshold Planning Quantities:** CERCLA requires notification of the National Response Center (Telephone 1-800-424-8802) in the event of a release of quantities of the following hazardous materials contained in this product, if the release is equal to or greater than the Reportable Quantities (RQs) SARA 302/304 requires emergency planning, including agency notification, for possible release of the following components of this material, based upon the Threshold Planning Quantities (TPQs) and/or release of Reportable Quantities.

Chemical Name	Reportable Quantity (RQ)	Threshold Planning Quantity (TPQ)
No Ingredients listed in this section.		

**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
Benzyl Chloride (trace < 10 ppm)	AZ, CA, CAP65C, CT, FL, ID, MA, MN, NJ, PA, RI
Isopropanol	AZ, CA, CT, FL, ID, MA, MN, NJ, PA, RI

AZ – Arizona Ambient Air Quality Guidelines  
CT – Connecticut Hazardous Air Pollutants  
CA – California Director's List of Hazardous Substances  
CAP65C – California Prop 65 Carcinogen  
FL – Florida Substances List  
ID – Idaho Non-carcinogen Toxic Air Pollutants

IL – Illinois Toxic Air Contaminant – Carcinogenic  
MA – Massachusetts Right to Know List  
MN – Minnesota Hazardous Substances List  
NJ – New Jersey Right to Know List  
PA – Pennsylvania Right to Know List  
RI – Rhode Island Hazardous Substances List

**WHMIS Classification:** B3, D2B, E. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

SECTION 16 **OTHER INFORMATION**

Hazard Ratings	HMIS (III)	NFPA
Health	3	3
Flammability	2	2
Reactivity	0	0
PPE	C	

**All sections reformatted in accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)**

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, NAVA Water Products makes no representations as to the



SAFETY DATA SHEET  
NAVA Algaecide 10 – AS\_0500\_NA

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**Prepared by**

North America Regulatory Affairs  
ICL-IP America Inc.  
95 MacCorkle Ave., S.W.  
South Charleston, WV 25303, USA  
Phone number: (304) 746-3000

**Prepared for**

NAVA Water Products  
95 MacCorkle Ave. SW,  
South Charleston, WV 25303, USA  
Tel: (304) 746-3000