

SAFETY DATA SHEET

SECTION 1 PRODUCT and COMPANY INFORMATION

TRADE NAME: **Castle® I-100™**

PRODUCT TYPE: Disinfectant Cleaner and Deodorizer
PRODUCT CODE: C37

MANUFACTURED FOR: Castle Products, Inc.
424 St. Paul Street
Rochester, NY 14605
800-876-0222 • FAX 585-325-4514
EMERGENCY 585-275-3232

SECTION 2 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING: Irritant 

Keep out of reach of children.

POTENTIAL HEALTH EFFECTS: Eyes: May be irritating to eyes.

Skin: Possible skin irritation.

Inhalation: May cause mucous membrane irritation.

Ingestion: Harmful if swallowed. May cause gastrointestinal discomfort.

SECTION 3 COMPOSITION INFORMATION ON INGREDIENTS

| INGREDIENTS | CAS # | PEL | TLV | STEL | % |
|--|-------------|----------|----------|------|----------|
| Water | 7732-18-5 | NE | NE | NE | 75-100% |
| N-Octyl-N-decyl-N,N-dimethylammonium chloride | 32426-11-2 | NE | NE | NE | 0.5-1% |
| N,N-Didecyl-N,N-dimethylammonium chloride | 7173-51-5 | NE | NE | NE | <0.5% |
| N,N-Dioctyl-N,N-dimethylammonium chloride | 5538-94-3 | NE | NE | NE | <0.5% |
| N-Alkyl (C12-16)-dimethylbenzylammonium chloride | 68424-85-1 | NE | NE | NE | 0.5-1.5% |
| Tetrasodium ethylenediamine tetraacetate | 64-02-8 | NE | NE | NE | <1% |
| Ethanol | 64-17-5 | 1000 ppm | 1000 ppm | NE | <1% |
| Linear Alcohol Ethoxylate | 34398-01-1 | NE | NE | NE | <1% |
| Citric Acid | 77-92-9 | NE | NE | NE | <1% |
| Dye, Fragrance | Proprietary | NE | NE | NE | <1% |

SECTION 4 FIRST AID MEASURES

First Aid Procedures:

Eye contact: Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician if irritation persists.

Skin contact: For skin contact flush with large amounts of water. Call a physician if irritation persists.

Inhalation: Immediately remove from further exposure. Give supplemental oxygen, if breathing is difficult. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by mouth to an unconscious person.

Note to physician: If the product is ingested, treat the affected person symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

FLASH POINT: >201°F (>94°C) LOWER EXPLOSIVE LIMIT: ND UPPER EXPLOSIVE LIMIT: ND

EXTINGUISHING MEDIA: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Appropriate for surrounding fire.

UNUSUAL FIRE & EXPLOSION HAZARDS: None

SPECIAL FIRE FIGHTING PROCEDURES: As in any fire, wear pressure-demand self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions: Isolate area. Keep unnecessary personnel away. Stay upwind. Keep out of low areas. Ventilate spaces before entering.

Environmental precautions: Prevent further leakage or spillage if safe to do so.

Methods for containment: Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up: Eliminate ignition sources including sources of electrical, static or frictional sparks. Wear appropriate protective equipment and clothing during clean-up.

Small Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for disposal.

Large Spills: Dike far ahead of liquid spill for later disposal. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid breathing mist or vapor. Avoid contact with skin and eyes. Wear suitable protective clothing. Wash hands thoroughly after handling.

Storage: DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. Store in a dry place no lower in temperature than 50°F (10°C) or higher than 120°F (49°C). Keep in a well-ventilated place.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits:

| ACGIH Components | Type | Value |
|------------------------|------|------------------------------------|
| Ethanol (64-17-5) | STEL | 1000 ppm |
| U.S. – OSHA Components | | |
| Ethanol (64-17-5) | PEL | 1000 ppm 1900 mg/m ³ |

Engineering controls: Use local exhaust ventilation.

Personal protective equipment:

Gloves: Wear impervious gloves.

Eye/Face Protection: Wear safety glasses or goggles.

Skin Protection: Wear clothing suited to the task being performed.

Respiratory Protection: Not normally required if good ventilation is maintained.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

| | | | |
|------------------------|----------------|--|----------------------------|
| BOILING POINT: | >200°F (>93°C) | SPECIFIC GRAVITY (H ₂ O=1): | 1.0 |
| VAPOR PRESSURE: | ND | PERCENT VOLATILE BY VOL %: | 95% |
| VAPOR DENSITY (air=1): | ND | EVAPORATION RATE (Butyl Acetate=1): | NA |
| SOLUBILITY IN WATER: | Complete | APPEARANCE & ODOR: | Yellow Liquid/ Lemon Scent |
| pH: | 7.0 | | |

SECTION 10 STABILITY and REACTIVITY DATA

STABILITY: Stable under normal conditions.

INCOMPATIBILITY (material to avoid): Strong acids or oxidizing agents,

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen, ammonia, carbon monoxide, carbon dioxide, and low molecular weight hydrocarbons may be produced.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11 TOXICOLOGICAL INFORMATION

Components Test Results

Alkyl & Dialkyl Dimethyl Ammonium Chlorides Acute Oral LD50 Rat: 50 - 500 mg/kg

Ethanol (64-17-5)

Acute Inhalation LC50 Mouse: 0.039 mg/l 4 Hours

Acute Inhalation LC50 Rat: 20000 mg/l 10 Hours

Acute Oral LD50 Mouse: 3450 mg/kg

Acute Oral LD50 Rat: 7060 mg/kg

Dodecyl dimethyl ammonium chloride (7173-51-5)

Acute Dermal LD50 Rabbit: 2730 mg/kg

Acute Oral LD50 Mouse: 268 mg/kg

Acute Oral LD50 Rat: 84 mg/kg

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

ACGIH Carcinogens:

Ethanol (CAS 64-17-5): A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity: Ethanol (CAS 64-17-5) 1 Carcinogenic to humans.

SECTION 12 ECOLOGICAL INFORMATION

Components Test Results

Ethanol (64-17-5) EC50 Water flea (*Daphnia magna*): 11.2 - 11.2 mg/l 48 hours
LC50 Fathead minnow (*Pimephales promelas*): > 100 mg/l 96 hours
LC50 Striped bass (*Morone saxatilis*): 19.1 - 19.1 mg/l 96 hours

Alkyl dimethyl benzyl ammonium chloride (C12-16) (CAS# 68424-85-1)

LC50 White sturgeon (*Acipenser transmontanus*): 0 - 0 mg/l 96 hours

Dodecyl dimethyl ammonium chloride (7173-51-5): Aquatic toxicity Very toxic to aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal instructions: 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.

CONTAINER DISPOSAL - Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse empty container with water. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.

SECTION 14 TRANSPORT INFORMATION

For shipments of containers of less than 5 liters (1.3 gallons) packaged in cartons of 4 or fewer containers:

UN No.: NA

Hazard Class: NA

Packing Group: NA

Proper shipping name: Consumer Commodity ORM-D

No Label Required

Other transport information:

Before transporting product containers:

- Ensure that containers are firmly secured.
- Compliance with applicable regulations

For Shipments of containers larger than 5 liters (1.3 gallons):

UN No.: UN1903

ADR Class: 8

Packing Group: III

Proper shipping name: Disinfectants, Liquid, Corrosive, n.o.s.

Label: 8, Corrosive

SECTION 15 REGULATORY INFORMATION

US federal regulations: All components are listed in the United States TSCA Regulations.

CERCLA (Superfund) reportable quantity: None

SARA (Superfund Amendments and Reauthorization Act of 1986):

313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Section 302 extremely hazardous substance: No

Section 311 hazardous chemical: No

Canada: This Product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

SECTION 16 OTHER INFORMATION

Further information: (HMIS[®] is a registered trade and service mark of the NPCA.)

HMIS[®] ratings Health: 2
Flammability: 1
Physical hazard: 0
NFPA ratings Health: 2
Flammability: 1
Instability: 0

Other: NA-Not Applicable, ND-Not Determined, NE-Not Established.

Disclaimer Terms and Conditions. This SDS is designed only as guidance for the products to which it applies. To the greatest extent permitted by applicable law, nothing contained herein creates any legal obligation including contractual obligations, expressed or implied warranties, including any warranties of merchantability or fitness for particular purpose; or confers any intellectual property rights, including rights to use trademarks or a license to use patents, issued or pending. The information contained herein is based on the manufacturer's own study and the work of others, and is subject to change at any time without further notice. There is no warranty, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein, and neither the provider nor the manufacturer (nor the agents, directors, officers, contractors or employees of either) are liable to any party for any damages of any nature, including direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of any information in this SDS, or in any other way related (directly or indirectly) to this SDS. The receipt and use of this information constitutes consent to these terms and conditions.

PREPARED: 2/21/88

UPDATED: 6/12/13

PRODUCT #: C37