

SAFETY DATA SHEET




SECTION 1 PRODUCT and COMPANY INFORMATION

TRADE NAME: **Castle® DeOdor PRO**

PRODUCT TYPE: Deodorizing system
PRODUCT CODE: ECL600

MANUFACTURED FOR: Castle Products, Inc.
424 St. Paul Street
Rochester, NY 14605
(800) 876-0222
EMERGENCY (585) 275-3232

SECTION 2 HAZARDS IDENTIFICATION

GHS CLASSIFICATION: WARNING:    Respiratory tract irritant. Causes burns to skin, serious eye damage. Oxidizer, may intensify fire. Keep out of reach of children.

PRECAUTIONARY STATEMENTS: Eyes: Causes serious eye damage.
Skin: Causes burns.
Inhalation: May be irritating to mucous membranes.
Ingestion: May be harmful if swallowed. Do not ingest.

SECTION 3 COMPOSITION INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%
Dry/Unactivated Product		
Activator*	NA	60-80%
Sodium Chlorite	7758-19-2	20-40%
Inerts*	NA	<2%
Activated Product		
Chlorine Dioxide	10049-04-4	NA

SECTION 4 FIRST AID MEASURES

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation persists. Exposure may cause visual disturbance such as seeing haloes around lights.

If on skin: Take off contaminated clothing and wash it before reuse. Wash with plenty of water. Call a physician if irritation persists. Gas phase may be absorbed, causing tissue and blood cell damage.

If swallowed: Rinse mouth. Call a physician if you feel unwell.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Chlorine dioxide gas is a strong respiratory irritant. High exposure may cause bronchial spasms and pulmonary edema, which may be delayed in onset. May cause severe headache. All symptoms may be delayed and long lasting. Prolonged exposure may cause bronchitis. Call a physician if you feel unwell.

SECTION 5 FIRE FIGHTING MEASURES

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

SPECIFIC/UNUSUAL HAZARDS: Sodium chlorite in the unactivated product is a strong oxidizer, and can support combustion in the absence of air. Chlorine dioxide, which may evolve from exposure of the unactivated product to water, is explosive in the gas phase at concentrations greater than 10% by volume. Do not allow chlorine dioxide gas to accumulate in confined spaces. Irritating gasses may be produced which will require SCBA or a fresh air source.

SPECIAL FIRE FIGHTING EQUIPMENT and PRECAUTIONS for FIREFIGHTERS: 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 (see section 7) 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: A large spill is unlikely to occur.

SECTION 7 HANDLING AND STORAGE

Handling: Use product as directed by label. Avoid breathing mist or vapors generated by activated product. Use only with adequate ventilation. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Thoroughly rinse any protective gear and handling equipment used prior to storage and reuse.

STORAGE: Observe all applicable regulations when storing this substance. Keep unactivated product in a cool, dry, ventilated area away from direct sunlight. Do not store with acids, chlorine and chlorine compounds, hypochlorites (bleach), organic solvents, sulfur and sulfite compounds, phosphorus, and combustible/flammable materials. Do not store in areas where sparking may occur. After envelope is spent, liquid product should be disposed of down designated disposal sink and flushed thoroughly with water. Throw away envelope. Ensure the micro-reactor used for air treatment or odor elimination is spent before discarding; see product label for total time to be immersed in water prior to discarding.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: NE

Appropriate Engineering Controls: Maintain adequate local exhaust ventilation.

Individual Protective Measures –

DRY PRODUCT:

If contents of pouch are exposed, spilled, or otherwise introduced into the environment:

- Wear protective rubber gloves (see manufacturer details for tolerances)
- Wear protective goggles or full face shield
- Wear an approved NIOSH mask to prevent inhaling fumes/dust
- Place contents on pouch in a plastic container
- Fill container with water to allow degradation/neutralization

ACTIVATED PRODUCT:

- If activated product is spilled, or otherwise introduced into the environment:
- Wear protective rubber gloves (see manufacturer details for tolerances)
- Wear protective goggles or full face shield
- Wear an approved NIOSH mask to prevent inhaling fumes
- If spillage is heavily concentrated, dilute

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE: Dry Product-white powdery substance.
Activated Product-light green to yellow liquid.

ODOR: Dry Product-NA
Activated Product-faint chlorine smell

ODOR THRESHOLD: 0.1 ppm

MELTING/FREEZING POINT: NA

BOILING POINT: NA

BOILING RANGE: NA

FLASH POINT: 365°F (185°C)

LOWER EXPLOSIVE LIMIT: ND

UPPER EXPLOSIVE LIMIT: ND

FLAMMABILITY (solid, gas): NA

AUTOIGNITION TEMPERATURE: ND

EVAPORATION RATE (Butyl Acetate=1): ND

VAPOR PRESSURE: ND

VAPOR DENSITY (air=1): ND

RELATIVE DENSITY: (H₂O=1): ND

SOLUBILITY IN WATER: Completely soluble

PARTITION COEFFICIENT (n-octanol/water): ND

pH: 7

DECOMPOSITION TEMPERATURE: 320°F (160°C)

VISCOSITY: NA

PERCENT VOLATILE BY VOL %: %

SECTION 10 STABILITY and REACTIVITY DATA

CHEMICAL STABILITY: Stable under normal conditions. Ingredients are oxidizers and may decompose if heated above 160 °C, opened, or wetted.

POSSIBILITY of HAZARDOUS REACTIONS: ND

CONDITIONS TO AVOID: Avoid storing product where it might become wet, or where the spilled contents of a damaged, unactivated pouch could dry to a crystalline salt or produce chlorine dioxide gas. Do not store where dry material may come into contact with sparking.

INCOMPATIBLE MATERIALS: Avoid accidental contact of dry ingredients or activated product with acids, chlorine compounds, hypochlorites (bleach), sulfur and sulfite compounds, phosphorus, organic solvents, and combustible/flammable materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Exposure of dry ingredients or activated product to acids or chlorine compounds can produce uncontrolled release of chlorine dioxide gas.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

CARCINOGEN STATUS: Not Listed.

TARGET ORGANS: Skin, eyes.

ADDITIONAL DATA: None.

HEALTH EFFECTS OF UNACTIVATED PRODUCT: None anticipated under normal conditions of use. Contact with dry ingredients may cause burns.

INHALATION: None anticipated under normal conditions of use.

SKIN CONTACT: None anticipated under normal conditions of use.

EYE CONTACT: None anticipated under normal conditions of use; however, eye contact with dry ingredients may cause irreversible eye damage.

INGESTION: None anticipated under normal conditions of use.

DERMAL SENSITIZATION: A dermal sensitization test [in accordance with EPA Health Effects Test Guidelines, OPPTS 870.2600 (2003)] was deemed not necessary by EPA since all ingredients are sealed inside packet and no exposure is created with proper use.

ACUTE INHALATION: LC50 >2.07mg/L (male and female rats): single exposure acute inhalation of the activated aqueous solution of chlorine dioxide.

CARCINOGEN STATUS:

OSHA: Not Listed. NTP: Not Listed. IARC: Not Listed.

TARGET ORGANS: Skin, eyes, respiratory tract, mucous membranes.

ADDITIONAL DATA: None.

HEALTH EFFECTS FROM EXPOSURE TO ACTIVATED PRODUCT: None anticipated under normal conditions of use.

POTENTIAL HEALTH EFFECTS FROM EXPOSURE TO CHLORINE DIOXIDE GAS:

INHALATION: Chlorine dioxide gas is a strong respiratory irritant. High exposure may cause bronchospasm and pulmonary edema, which may be delayed in onset. May also cause severe headache. All symptoms may be delayed and long lasting. Prolonged exposure may cause bronchitis.

SKIN CONTACT: Skin irritant. Gas phase may be absorbed, causing tissue and blood cell damage.

EYE CONTACT: Eye irritant. Exposure may cause visual disturbance such as seeing haloes around lights.

INGESTION: Liquid solutions of chlorine dioxide gas can be irritating and in high concentrations cause chemical burns. Not anticipated from this product.

ADDITIONAL DATA: May have increased effects with exposure to chlorine, other chlorine oxides, and chlorine-fluorine compounds.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY: NA

PERSISTENCE and DEGRADABILITY: NA

BIOACCUMULATIVE POTENTIAL: NA

MOBILITY in SOIL: NA

OTHER ADVESE EFFECTS: None Known.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal Considerations: Dispose according to all applicable Federal, State, and Local regulations.

SECTION 14 TRANSPORT INFORMATION

UN Number: UN1496

UN Proper Shipping Name: Oxidizer

Transport Hazard Class(es): 5.1

Packing Group: II

Marine Pollutant: ND

Special Precautions: None Required

DOT Classification: Consumer Commodity ORM-D, or Limited Quantity.

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

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

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