



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont  
Material Safety Data Sheet

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DuPont(tm) Spa Care Sanitizer Brominating Tablets  
6522CR Revised 9-NOV-2005  
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CHEMICAL PRODUCT/COMPANY IDENTIFICATION  
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Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont  
1007 Market Street  
Wilmington, DE 19898

PHONE NUMBERS

Product Information : 1-800-441-7515 (outside the U.S.  
302-774-1000)  
Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S.  
703-527-3887)  
Medical Emergency : 1-800-441-3637 (outside the U.S.  
302-774-1000)

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COMPOSITION/INFORMATION ON INGREDIENTS  
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Components

Material	CAS Number	%
1-Bromo-3-chloro-5,5-dimethylhydantoin	16079-88-2	
1,3-Dichloro-5,5-Dimethyl Hydantoin	118-52-5	
1,3-dichloro-5-ethyl-5-methylhydantoin	89415-87-2	

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HAZARDS IDENTIFICATION  
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Potential Health Effects

Eye Contact:

Direct eye contact can result in severe eye irritation and/or chemical burns with potential irreversible tissue damage.

Skin Contact:

Direct skin contact can result in severe skin irritation and/or chemical burns with potential irreversible tissue damage. Repeated skin exposure may induce sensitization.

Ingestion:

May be fatal if swallowed; irritating to nose and throat.

Inhalation:

Inhalation of dust or aerosol can be severely irritating to

## (HAZARDS IDENTIFICATION - Continued)

the lungs with potential systemic absorption and tissue damage.

## Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

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FIRST AID MEASURES  
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## First Aid

## EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

## SKIN CONTACT

In case of contact, immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.

## INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

## INHALATION

If inhaled, immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

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FIRE FIGHTING MEASURES  
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## Flammable Properties

Flash Point	: 287 F (142 C)
Method	: Cleveland Open Cup - COC.

## Extinguishing Media

Water, Foam, Dry Chemical.

## Fire Fighting Instructions

Evacuate personnel to a safe area. Wear self-contained breathing apparatus (SCBA) and full protective equipment. Flood with water. Cool tank/container with water spray.

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ACCIDENTAL RELEASE MEASURES  
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## Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Material is a strong oxidizer. May ignite combustible materials and may produce noxious gases. Products of combustion are toxic. Airborne dusts of this product in an enclosed space and in the presence of an ignition source may constitute an explosion hazard. Use adequate explosion-proof ventilation systems to control dust at the source. Avoid generating product dust near sources of ignition, including static electricity.

## Accidental Release Measures

DANGER! Oxidizing and corrosive material. Possible dust explosion hazard. Wear appropriate protective equipment and respiratory protection. Remove all sources of ignition.

Carefully sweep up spilled material (avoid generating dust) and place in an appropriate container for disposal. Do not contaminate with oxidizable materials. Neutralize any residue with dilute, alkaline sodium bisulfite or thiosulfate solution; absorb with sand or vermiculite and place in compatible container for disposal. If spilled material is wet, neutralize and proceed as stated above.

Material is toxic to fish. Do not discharge into lakes, streams, ponds or public water.

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HANDLING AND STORAGE  
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## Handling (Personnel)

Do not breathe dust. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Wash clothing after use.

## Handling (Physical Aspects)

Avoid dust generation. Keep container tightly closed.

## Storage

Store in a cool, dry place. Do NOT expose to direct sunlight. Store away from oxidizers.

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EXPOSURE CONTROLS/PERSONAL PROTECTION  
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## Engineering Controls

Use only with adequate ventilation.

## Personal Protective Equipment

## EYE/FACE PROTECTION

Wear coverall chemical splash goggles. Additionally, wear a face shield where the possibility exists for face contact due to splashing or spraying of material.

## RESPIRATORS

Where there is potential for airborne exposures in excess of applicable limits, wear NIOSH approved respiratory protection.

## PROTECTIVE CLOTHING

Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, jacket, hood and boots.

## Exposure Guidelines

## Applicable Exposure Limits

1,3-Dichloro-5,5-Dimethyl Hydantoin

PEL (OSHA) : 0.2 mg/m<sup>3</sup>, 8 Hr. TWA

TLV (ACGIH) : 0.2 mg/m<sup>3</sup>, 8 Hr. TWA

STEL 0.4 mg/m<sup>3</sup>

AEL \* (DuPont) : None Established

\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

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PHYSICAL AND CHEMICAL PROPERTIES  
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## Physical Data

Melting Point : 120-148 C (248-298 F)  
% Volatiles : <0.5 %  
Evaporation Rate : <1 (Butyl Acetate=1.0)  
Solubility in Water : 5 g/L @ 25 C  
pH : 3.6 10 g/l @ 25 C  
Odor : (slight), Pungent.  
Form : Briquettes.  
Color : Off-White.

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STABILITY AND REACTIVITY  
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## Chemical Stability

Stable.

## Incompatibility with Other Materials

Incompatible with strong acids, alkalies, high storage temperatures, moisture and readily oxidizable material.

## Decomposition

Thermal decomposition may produce toxic vapors/fumes of chlorine, bromine, organic materials and oxides of carbon and nitrogen.

## Polymerization

Polymerization will not occur.

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TOXICOLOGICAL INFORMATION  
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## Animal Data

DuPont(tm) Spa Care Brominating Tablets:

Oral LD50 (rat): 468-477 mg/kg

1-Bromo-3-chloro-5,5-dimethylhydantoin:

Dermal LD50 (rabbit): > 2000 mg/kg

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ECOLOGICAL INFORMATION  
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## Ecotoxicological Information

## Aquatic Toxicity:

96 hour LC50 - rainbow trout: 0.5 mg/l  
96 hour LC50 - bluegill sunfish: 1.2 mg/l  
48 hour LC50 - daphnia magna: 0.4 mg/l  
96 hour LC50 - mysid shrimp: 0.93 mg/l

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DISPOSAL CONSIDERATIONS  
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## Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

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TRANSPORTATION INFORMATION  
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## Shipping Information

DOT/IMO/IATA  
Proper Shipping Name : Oxidizing Solid, N.O.S.  
(Dimethylhydantoin)  
Hazard Class : 5.1  
UN No. : 1479  
Packing Group : II  
Label(s) : Oxidizer

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REGULATORY INFORMATION  
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## U.S. Federal Regulations

TSCA Inventory Status : Listed.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes  
Chronic : No  
Fire : No  
Reactivity : No

EPA Registration #: 71654-9

## State Regulations (U.S.)

California Proposition 65 List: Bromoform (12 ppm)

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OTHER INFORMATION  
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## NFPA, NPCA-HMIS

NPCA-HMIS Rating  
Health : 2  
Flammability : 1  
Reactivity : 1

Personal Protection rating to be supplied by user depending on use conditions.

(Continued)

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsible for MSDS : MSDS Coordinator  
> : DuPont Chemical Solutions Enterprise  
Address : Wilmington, DE 19898  
Telephone : (800) 441-7515

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS