



Material Safety Data Sheet

1 - Chemical Product and Company Identification

Manufacturer: WD-40 Company Address: 1061 Cudahy Place (92110) P.O. Box 80607 San Diego, California, USA 92138 -0607 Telephone: Emergency only: 1-888-324-7596 (PROSAR) Information: 1-888-324-7596 Chemical Spills: 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)	Trade Name: <u>2000 Flushes Bleach</u> Chemical Name: Mixture Product Use: Toilet Bowl Cleaner and Deodorizer MSDS Date Of Preparation: 11/23/10
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2 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent
1,3-Dichloro-5,5-dimethylhydantoin	118-52-5	81.1%
1,3-Dichloro-5-ethyl-5-methylhydantoin	89415-87-2	16.1%
Chloro-5-ethyl-5-methylhydantoin	Not assigned	1.8%
Non-Hazardous Ingredients	Mixture	1.0%

See Section 8 for Exposure Limits

3 – Hazards Identification

Emergency Overview: DANGER!

Bleach tablets are strong oxidizers. Possible fire hazard in contact with flammable or combustible material. Bleach tablets are corrosive and may cause burns to the eyes, skin, mouth and gastrointestinal tract. May be fatal if swallowed. Repeated exposure may cause allergic skin reaction (sensitization).

Symptoms of Overexposure:

Inhalation: Inhalation is not a normal route of exposure for this product. If dust from Bleach Tablets is inhaled, severe irritation of the nose, mouth and upper respiratory tract would be expected. May aggravate existing respiratory conditions such as asthma.

Skin Contact: Bleach Tablets are corrosive. Direct contact with bleach tablet may cause severe irritation and possible burns. Repeated skin contact may result in sensitization with swelling and rash.

Eye Contact: Bleach Tablets are corrosive. Direct contact will cause severe irritation, pain, burns and possible permanent eye damage.

Ingestion: Bleach Tablets are corrosive and will cause immediate and severe burns of the mucous membranes of the mouth and gastrointestinal tract. May be fatal if swallowed.

Chronic Effects: None currently known.

Medical Conditions Aggravated by Exposure: Pre-existing skin disorders.

Suspected Cancer Agent:

Yes No X

4 – First Aid Measures

Ingestion (Swallowed): Rinse out mouth and give sips of water if the person is able to swallow and is alert. DO NOT INDUCE VOMITING. Get immediate medical attention. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596.

Eye Contact: Flush with water. Remove contact lenses, if present, after the first 5 minutes and flush again with water for at least 15 -20 minutes. Get immediate medical attention.

Skin Contact: Immediately flush skin with plenty of water for 15-20 minutes. Remove any contaminated clothing and rinse immediately with water to dilute concentrated bleach. Launder clothing before reuse. If

irritation develops and persists, get medical attention. Note concentrated bleach in contact with clothing may be a fire hazard.

Inhalation (Breathing): If dust from product is inhaled, move to fresh air. If the person is not breathing call 911 or an ambulance, then give artificial respiration. Call a poison center for treatment advice. Have the product container or label with you when calling a poison center or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

5 – Fire Fighting Measures

Extinguishing Media: Flood with water or foam. Do not use dry chemicals, carbon dioxide or halogenated extinguishing agents.

Unusual Fire or Explosion Hazards: Heating Bleach Tablets will generate noxious gases. To minimize the generation of these gases, flood with a large quantity of water. Bleach Tablets are strong oxidizers and may react with flammable or combustible materials to cause a fire or explosion.

6 – Accidental Release Measures

Bleach Tablets spilled from a single retail package should be carefully collected and flushed down the drain with plenty of water. Do not generate airborne dust. If a damp cloth or paper towel is used to collect material, rinse it thoroughly with a large amount of water before reuse or disposal. Concentrated bleach may cause a fire in contact with paper, rags or other combustible material. Large amounts should be carefully collected into a plastic container for disposal.

7 – Handling and Storage

Handling: Do not touch tablet. Do not get in eyes, on skin or clothing. Wear rubber gloves when handling. Avoid breathing dust from product. Wash thoroughly after use. Keep out of the reach of children. Keep Bleach Tablets away from flammable and combustible materials. DO NOT mix with anything other than water.

Storage: Store in original container in a cool, dry, well-ventilated area. Do not store at elevated temperatures. Avoid heat and direct sunlight.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
1,3-Dichloro-5,5-dimethylhydantoin	0.2 mg/m ³ TWA OSHA PEL/ACGIH TLV 0.4 mg/m ³ STEL ACGIH TLV
1,3-Dichloro-5-ethyl-5-methylhydantoin	0.2 mg/m ³ TWA (Manufacturer Recommended)
Chloro-5-ethyl-5-methylhydantoin	0.2 mg/m ³ TWA (Manufacturer Recommended)

The Following Controls are Recommended for Normal Consumer Use of this Product

Engineering Controls: No special controls required for normal use.

Personal Protection:

Eye Protection: None normally required. Prevent eye contact. When opening, hold plastic pouch away from face.

Skin Protection: Avoid skin contact. Wear rubber gloves when handling product.

Respiratory Protection: None required for normal use.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Engineering Controls: Use with adequate general ventilation or local exhaust to minimize exposure levels.

Personal Protection:

Eye Protection: Chemical safety goggles recommended.

Skin Protection: Wear rubber gloves and protective clothing as required to prevent skin contact.

Respiratory Protection: None required for handling finished product. If exposure levels are excessive, wear an approved respirator. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Work/Hygiene Practices: Prevent contact with the eyes, skin and clothing. Wash thoroughly after handling.

9 – Physical and Chemical Properties

Boiling Point:	Not available	Evaporation Rate:	<1 (butyl acetate=1)
Vapor Density (air = 1):	Not available	Vapor Pressure:	Not available
Solubility in Water:	0.56 g/100 g @ 25°C	pH:	3.6 (1% solution)
Specific Gravity (H2O=1):	Not available	Percent Volatile (volume):	<0.5
Flash Point:	None	Flammable Limits:	Not applicable
Appearance and Odor:	Off-white tablet with a very slight, pungent odor.		

10 – Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid high temperatures and direct sunlight.

Incompatibilities: Acids, bases, moisture, reducing agents, readily utilizable materials including flammable and combustible materials.

Hazardous Decomposition Products: Thermal decomposition of Bleach Tablets may generate noxious gases including chlorine, nitrogen oxides, carbon oxides, organic materials.

11 – Toxicological Information

1,3-Dichloro-5,5-dimethylhydantoin: Oral LD50 rat 618 mg/kg, Dermal LD50 rabbit >20 g/kg, eye irritation (rabbit) severe, skin irritation (rabbit) corrosive, Buehler test (guinea pig) sensitizing.

1,3-Dichloro-5-ethyl-5-methylhydantoin: Oral LD50 rat 579 mg/kg, skin irritation (rabbit) corrosive.

12 – Ecological Information

1,3-Dichloro-5,5-dimethylhydantoin: LC50 fish 1.1 mg/L/96 hr, EC50 daphnia magna 0.95 mg/L/48 hr.

1,3-Dichloro-5-ethyl-5-methylhydantoin: LC50 fish 0.87 - 1.1 mg/L/96 hr, EC50 daphnia magna 0.95 mg/L/48 hr. EbC50 green algae 0.12 mg/L/72 hr.

Concentrated material is toxic to aquatic organisms. Diluted product in use is not expected to present a hazard to the environment.

13 - Disposal Considerations

Dispose in accordance with local, state and federal regulations. RCRA hazardous waste no: D001, D002

14 – Transportation Information

US DOT Shipping Description: Consumer Commodity, ORM-D

Canadian TDG Shipping Description: Consumer Commodity (Limited Quantity)

International (Export) Shipping Description: UN3085, OXIDIZING SOLID, CORROSIVE, N.O.S. (1,3-DICHLORO-5,5-DIMETHYLMIDAZOLIDINE-2,4-DIONE, 5.1 (8), III

15 – Regulatory Information

US REGULATIONS

Hazard Category For Section 311/312: Acute Health, Fire Hazard

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III

Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All ingredients for this product are listed on the TSCA inventory or exempt from notification.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not contain chemicals regulated under California Proposition 65.

VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

Canadian WHMIS Classification: Class C (Oxidizing Material), Class E (Corrosive), Class D-2-B (deodorant – eye irritant)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16 – Other Information:

HMIS Hazard Rating:

Health – 3 (serious hazard), Fire Hazard – 0 (minimal hazard), Physical Hazard – 2 (moderate hazard)

SIGNATURE:  TITLE: Director of Global Regulatory Affairs

REVISION DATE: November 2010 SUPERSEDES: May 2007