

MATERIAL SAFETY DATA SHEET



1. Product and Company Identification

Product Name Fluidmaster Bleach Cartridge
CAS # Mixture
Product use Toilet bowl cleaner
Manufacturer Fluidmaster Inc.
30800 Rancho Viejo Road
San Juan Capistrano, CA 92675 US
Emergency Phone: 1-800-805-1770

2. Hazards Identification

Emergency overview DANGER
POISON
CORROSIVE TO EYES AND SKIN
Oxidizing material.
May cause sensitization by skin contact.
KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes Causes chemical burns. May cause blindness.

Skin Causes chemical burns. Contains a potential skin sensitizer.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Target organs Eyes. Respiratory system. Skin.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms The product causes burns of eyes, skin and mucous membranes. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects Components of this product have been identified as having potential environmental concerns.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
1,3-Dichloro-5-ethyl-5-methylhydantoin	89415-87-2	7 - 13
2,4-Imidazolidinedione, 1-bromo-3-chloro-5,5-dimethyl-	16079-88-2	40 - 70
1,3-Dichloro-5,5-dimethyl hydantoin	118-52-5	15 - 40

4. First Aid Measures

First aid procedures

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.

Inhalation Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician Symptoms may be delayed. If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children. Immediate medical attention is required.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Dry chemical. Carbon dioxide. Foam.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Container may explode in heat of fire.
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of nitrogen. Hydrogen chloride.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. May cause chemical burns to eyes and skin. Avoid contact with eyes, skin and clothing.
Storage	Keep out of reach of children. Store in a closed container away from incompatible materials. Keep away from heat, open flames or other sources of ignition.

8. Exposure Controls / Personal Protection

Exposure limits Ingredient(s)	Exposure Limits
1,3-Dichloro-5,5-dimethyl hydantoin	ACGIH-TLV TWA: 0.2 mg/m3 STEL: 0.4 mg/m3 OSHA-PEL TWA: 0.2 mg/m3
1,3-Dichloro-5-ethyl-5-methylhydantoin	ACGIH-TLV Not established OSHA-PEL Not established
2,4-Imidazolidinedione, 1-bromo-3-chloro-5,5-dimethyl-	ACGIH-TLV Not established OSHA-PEL Not established

Engineering controls	General ventilation normally adequate. Provide adequate ventilation.
Personal protective equipment	
Eye / face protection	Chemical splash goggles.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin and body protection	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Solid.
Color	White.
Form	Tablets
Odor	Bleach
Odor threshold	Not available
Physical state	Solid
pH	3.6 (1%)
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	287 °F (141.66 °C)
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not applicable
Flammability limits in air, upper, % by volume	Not applicable
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Solubility (H2O)	0.54 g/100 g water
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	This product may react with strong acids.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with anything but water.
Incompatible materials	Oxidizers. Ammonia. Acids.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Hydrogen chloride.

11. Toxicological Information

Acute effects Acute LD50: 468 mg/kg, Rat, Oral

Component analysis - LC50

Ingredient(s)	LC50
1,3-Dichloro-5,5-dimethyl hydantoin	Not available
1,3-Dichloro-5-ethyl-5-methylhydantoin	Not available
2,4-Imidazolidinedione, 1-bromo-3-chloro-5,5-dimethyl-	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
1,3-Dichloro-5,5-dimethyl hydantoin	542 mg/kg rabbit; 542 mg/kg rat
1,3-Dichloro-5-ethyl-5-methylhydantoin	542 mg/kg rat
2,4-Imidazolidinedione, 1-bromo-3-chloro-5,5-dimethyl-	578 mg/kg rat

Effects of acute exposure

Eye	Causes chemical burns. May cause blindness.
Skin	Causes chemical burns. Contains a potential skin sensitizer.
Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Sensitization Contains a potential skin sensitizer.

Chronic effects Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity Non-hazardous by WHMIS/OSHA criteria.

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

Name of Toxicologically Synergistic Products Not available

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns.
Persistence / degradability	This product is biodegradable.
Bioaccumulation / accumulation	Not available
Mobility in environmental media	Not available
Environmental effects	Not available
Aquatic toxicity	Not available
Partition coefficient	Not available
Chemical fate information	Not available
Other adverse effects	Not available

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

OXIDIZING SOLID, CORROSIVE, N.O.S.: Class 5.1 (8); UN3085; PG II,
CONSUMER COMMODITY ORM-D or Ltd. Qty.

Transportation of Dangerous Goods (TDG - Canada)

OXIDIZING SOLID, CORROSIVE, N.O.S.: Class 5.1(8); UN3085; PG II,
CONSUMER COMMODITY or Ltd. Qty.

IATA/ICAO (Air)

OXIDIZING SOLID, CORROSIVE, N.O.S.: Class 5.1 (8); UN3085; PG II, Ltd. Qty.

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List

1,3-Dichloro-5,5-dimethyl hydantoin	118-52-5	1 %
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WHMIS status Controlled

WHMIS classification Class C - Oxidizing Material, Class D - Division 1B, 2B, Class E - Corrosive Material

WHMIS labeling



Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - Yes

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

1,3-Dichloro-5,5-dimethyl hydantoin 118-52-5 Present

U.S. - Massachusetts - Right To Know List

1,3-Dichloro-5,5-dimethyl hydantoin 118-52-5 Present

U.S. - Minnesota - Hazardous Substance List

1,3-Dichloro-5,5-dimethyl hydantoin 118-52-5 Present

U.S. - New Jersey - Right to Know Hazardous Substance List

1,3-Dichloro-5,5-dimethyl hydantoin 118-52-5 sn 0650

U.S. - Pennsylvania - RTK (Right to Know) List

1,3-Dichloro-5,5-dimethyl hydantoin 118-52-5 Present

U.S. - Rhode Island - Hazardous Substance List

1,3-Dichloro-5,5-dimethyl hydantoin 118-52-5 Toxic

Inventory name

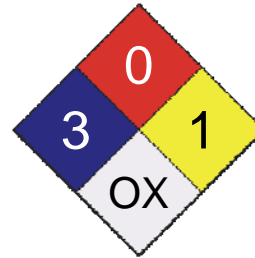
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 3
Flammability	0
Physical Hazard	1
Personal Protection	B

**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

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Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.