



Material Safety Data Sheet

1,3-Dibromo-5,5-dimethylhydantoin, 98%

MSDS# 54619

Section 1 - Chemical Product and Company Identification

MSDS Name: 1,3-Dibromo-5,5-dimethylhydantoin, 98%

Catalog Numbers: AC169540000, AC169540250, AC169545000

Synonyms: DDH, 1,3-Dibromo-5,5-dimethyl-2,4-imidazolidinedione; Dibromantin; Dibromantine; N,N'-Dibromodimethylhydantoin; Hydantoin, 1,3-dibromo-5,5-dimethyl-; 2,4-Imidazolidinedione, 1,3-dibromo-5,5-dimethyl-.

Company Identification:

Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA)

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call:

800-ACROS-01

For information in Europe, call:

+32 14 57 52 11

Emergency Number, Europe:

+32 14 57 52 99

Emergency Number US:

201-796-7100

CHEMTREC Phone Number, US:

800-424-9300

CHEMTREC Phone Number, Europe:

703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 77-48-5

Chemical Name: 1,3-Dibromo-5,5-dimethylhydantoin

%: 98.0

EINECS#: 201-030-9

Hazard Symbols: XN



Risk Phrases: 22 36/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Causes respiratory tract irritation. Oxidizer. Moisture sensitive. The toxicological properties of this material have not been fully investigated. Harmful if swallowed. Causes severe eye and skin irritation. Target Organs: Eyes, skin, mucous membranes.

Potential Health Effects

Eye: Causes severe eye irritation.

Skin: Causes severe skin irritation.

Ingestion: Harmful if swallowed.

Inhalation: Inhalation of dust may cause respiratory tract irritation.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water with caution and in flooding amounts. Oxidizer. Greatly increases the burning rate of combustible materials. Containers may explode in the heat of a fire.

Extinguishing Media: Use water only! Do NOT use carbon dioxide or dry chemical. Do NOT use alcohol foams. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature: Not available.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: ; instability: OX

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Do not get water inside containers.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Do not allow contact with water. Keep from contact with moist air and steam.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep refrigerated. (Store below 4°C/39°F.) Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1,3-Dibromo-5,5-dimethylhydantoin	none listed	none listed	none listed

OSHA Vacated PELs: 1,3-Dibromo-5,5-dimethylhydantoin: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face

- Eyes: protection regulations in 29 CFR 1910.133 or European Standard EN166.
- Skin: Wear appropriate protective gloves to prevent skin exposure.
- Clothing: Wear appropriate protective clothing to prevent skin exposure.
- Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Powder

Color: white

Odor: None reported.

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 368-376 deg C

Freezing/Melting Point: 187-191 deg C

Decomposition Temperature:

Solubility in water: 0.32g/100cc

Specific Gravity/Density:

Molecular Formula: C5H6Br2N2O2

Molecular Weight: 285.91

Section 10 - Stability and Reactivity

- Chemical Stability: Stable under normal temperatures and pressures.
- Conditions to Avoid: Dust generation, moisture.
- Incompatibilities with Other Materials: Strong reducing agents, strong bases, moisture, easily oxidizable materials.
- Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen bromide, bromine.
- Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 77-48-5: MU0686000

RTECS:

LD50/LC50: CAS# 77-48-5: Oral, rat: LD50 = 250 mg/kg;

Other: Inhalation, rat: LCLo = 29g/m³/1h; Dermal, rabbit: LDLo = 20

Carcinogenicity: 1,3-Dibromo-5,5-dimethylhydantoin - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: OXIDIZING SOLID, N.O.S.

Hazard Class: 5.1

UN Number: UN1479

Packing Group: II

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 77-48-5: Not available

Canada

CAS# 77-48-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: C, D1B, D2B

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

CAS# 77-48-5 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 77-48-5 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 11/09/1998

Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
