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**1. Identification****1.1 GHS Product identifier**

**Product name** Dimethyloldimethyl hydantoin

**1.2 Other means of identification**

**Product number** IMI506

**Other names** 1,3-bis

**1.3 Recommended use of the chemical and restrictions on use**

**Identified uses** For industry use only.

**Uses advised against** no data available

**1.4 Supplier's details**

**Company** Acros PharmaTech Limited

**Address** HongKong: Unit 3A-8,12/F,Kaiser Centre,No.18 Centre Street,Sai Ying Pun,HongKong

Mainland: Suite 920,Changwu Road 888,Changzhou,Jiangsu,China

**Telephone** 86(519)85265509

**2. Hazard identification****2.1 Classification of the substance or mixture**

Acute toxicity - Oral, Category 4

**2.2 GHS label elements, including precautionary statements**

**Pictogram(s)**



**Signal word**

Warning

**Hazard statement(s)**

H302 Harmful if swallowed

**Precautionary statement(s)**

P264 Wash ... thoroughly after handling.

**Prevention**

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/...if you feel unwell.

**Response**

P330 Rinse mouth.

**Storage**

none

**Disposal**

P501 Dispose of contents/container to ...

**2.3 Other hazards which do not result in classification**

none

**3. Composition/information on ingredients****3.1 Substances**

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Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Dimethyloldimethyl hydantoin	Dimethyloldimethyl hydantoin	6440-58-0	none	≥95%

## 4. First-aid measures

### 4.1 Description of necessary first-aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

/SRP:/ Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. /Poisons A and B/

## 5. Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Specific hazards arising from the chemical

no data available

### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

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## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 6.3 Methods and materials for containment and cleaning up

If a spill occurs, clean it up promptly. Don't wash it away. Instead, sprinkle the spill with sawdust, vermiculite, or kitty litter. Sweep it into a plastic garbage bag, and dispose of it as directed on the pesticide product label.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container closed. Store in a dry place. Do not store at elevated temperatures. Keep from freezing. Do not reuse empty container. /Dantogard XL-1000/

## 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

no data available

#### Biological limit values

no data available

### 8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

Wear dust mask when handling large quantities.

#### Thermal hazards

no data available

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**9. Physical and chemical properties**

Physical state	Liquid
Colour	Solid
Odour	Odorless
Melting point/ freezing point	797 °C(lit.)
Boiling point or initial boiling point and boiling range	303.7°C at 760 mmHg
Flammability	no data available
Lower and upper explosion limit / flammability limit	no data available
Flash point	137.5°C
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	In water, 77.3 g/100 cc
Partition coefficient n-octanol/water (log value)	log Kow = -2.9
Vapour pressure	9.0X10-8 mm Hg at 25°C
Density and/or relative density	1.349 g/cm3
Relative vapour density	no data available
Particle characteristics	no data available

**10. Stability and reactivity****10.1 Reactivity**

no data available

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

no data available

**10.4 Conditions to avoid**

no data available

**10.5 Incompatible materials**

no data available

**10.6 Hazardous decomposition products**

no data available

**11. Toxicological information****Acute toxicity**

- Oral: LD50 Sprague-Dawley Rat (male) oral 3-5 g/kg
- Inhalation: no data available
- Dermal: no data available

**Skin corrosion/irritation**

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no data available

**Serious eye damage/irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**STOT-single exposure**

no data available

**STOT-repeated exposure**

no data available

**Aspiration hazard**

no data available

**12. Ecological information****12.1 Toxicity**

- Toxicity to fish: LC50; Species: Lepomis macrochirus (Bluegill); Conditions: freshwater, static; Concentration: 173 ppm for 96 hr (95% confidence interval: 141-212 ppm) /55% purity
- Toxicity to daphnia and other aquatic invertebrates: EC50; Species: Daphnia magna (Water flea) age <24 hr; Conditions: freshwater; static; Concentration: 37 ppm for 96 hr (95% confidence interval: 27-51 ppm); Effect: intoxication, immobilization /55% purity
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

**12.2 Persistence and degradability**

AEROBIC: Using OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test), 1,3-dimethylol-5,5-dimethylhydantoin was found to be readily biodegradable in activated sludge with 75% degradation in 10 days and 95% degradation in 28 days(1). The degradation product of 1,3-dimethylol-5,5-dimethylhydantoin, 5,5-dimethylhydantoin, was found to be readily biodegradable via OECD Guideline 301 B (Ready Biodegradability: CO<sub>2</sub> Evolution Test) with 87% CO<sub>2</sub> evolution within 28 days of incubation and >60% degradation in 10 days(1). 5,5-Dimethylhydantoin was steadily biodegraded using OECD Guideline 308 (Aerobic and Anaerobic Transformation in Aquatic Sediment Systems) with half-lives of 13-24 days(1).

**12.3 Bioaccumulative potential**

An estimated BCF of 3 was calculated in fish for 1,3-dimethylol-5,5-dimethylhydantoin(SRC), using a log Kow of -2.9(1) and a regression-derived equation(2). According to a classification scheme(2), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC). Dimethylhydantoin (DMT), a degradation product of 1,3-dimethylol-5,5-dimethylhydantoin, has a BCF of 0.08(1).

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**12.4 Mobility in soil**

Using OECD Guideline 121 (Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC)), the Koc of 1,3-dimethylol-5,5-dimethylhydantoin was determined to be <17.8(1). According to a classification scheme(2), this estimated Koc value suggests that 1,3-dimethylol-5,5-dimethylhydantoin is expected to have very high mobility in soil.

**12.5 Other adverse effects**

no data available

**13. Disposal considerations****13.1 Disposal methods****Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

**Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

**14. Transport information****14.1 UN Number**

ADR/RID: no data available IMDG: no data available IATA: no data available

**14.2 UN Proper Shipping Name**

ADR/RID: no data available

IMDG: no data available

IATA: no data available

**14.3 Transport hazard class(es)**

ADR/RID: no data available IMDG: no data available IATA: no data available

**14.4 Packing group, if applicable**

ADR/RID: no data available IMDG: no data available IATA: no data available

**14.5 Environmental hazards**

ADR/RID: no IMDG: no IATA: no

**14.6 Special precautions for user**

no data available

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

no data available

**15. Regulatory information**

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**15.1 Safety, health and environmental regulations specific for the product in question**

Chemical name	Common names and synonyms	CAS number	EC number
Dimethyloldimethyl hydantoin	Dimethyloldimethyl hydantoin	6440-58-0	none
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.

**16. Other information****Abbreviations and acronyms**

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

**References**

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

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**Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.**