

SAFETY DATA SHEET

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1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY**Identification of the product**

Catalog numbers: ACT-5-HDMA, ACT-25-HDMA, ACT-100-HDMA

Product name: HDMA

Chemical name: 1-[(Dimethylamino)(morpholino)methylene]-1H-[1,2,3]triazolo[4,5-b]pyridine-1-ium 3-oxide hexafluorophosphate.

Chemical Formula: C₁₂H₁₇F₆N₆O₂P

Chemical Family: Coupling reagent

Recommended Use: Peptide synthesis

2. HAZARDS IDENTIFICATION**General advice**

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

Routes of Entry

Dermal contact. Eye contact. Inhalation. Ingestion

Potential Acute Health Effects

Eyes: Hazardous in case of eye contact

Skin: Hazardous in case of skin contact.

Inhalation: Hazardous in case of inhalation (lung irritant)

Ingestion: Hazardous in case of ingestion

Classification of the substance or mixture**Classification according to Regulation (EC) No 1272/2008**

- Acute toxicity, Oral (Category 4), H302
- Acute toxicity, Inhalation (Category 4), H332
- Acute toxicity, Dermal (Category 4), H312
- Skin irritation (Category 2), H315
- Eye irritation (Category 2), H319
- Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to the EU Directives 67/548/EEC or 1999/45/EC

- Xn Harmful R20/21/22, R36/37/38

For the full text of the R-phrases mentioned in this Section, see Section 16.

Label elements

Labeling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Warning

Hazard statement(s)

- H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

Precautionary statement(s)

- P261 Avoid breathing dust.
- P280 Wear protective gloves/ protective clothing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

1-[(Dimethylamino)(morpholino)methylene]-1H-[1,2,3]triazolo[4,5-b]pyridine-1-ium 3-oxide hexafluorophosphate N-methyl-N-[4-morpholinyl(3-oxido-1H-1,2,3-triazolo[4,5-b]pyridin-1-yl)methylene]methanaminium, hexafluorophosphate

Components	CAS #	Chemical Formula	Molecular Weight
HDMA	958029-37-3	C ₁₂ H ₁₇ F ₆ N ₆ O ₂ P	422.3 g/mol

4. FIRST AID MEASURES

Description of first aid measures

General advice

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

Eye Contact:

- Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes
- Cold water may be used
- Get medical attention immediately

Skin Contact:

- In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes
- Cold water may be used
- Wash clothing before reuse. Thoroughly clean shoes before reuse.
- Get medical attention immediately

Inhalation:

- If inhaled, move to fresh air. If not breathing, give artificial respiration
- If breathing is difficult, give oxygen
- Get medical attention immediately

Ingestion:

- If swallowed, do not induce vomiting unless directed to do so by medical personnel
- Never give anything by mouth to an unconscious person
- Loosen tight clothing such as a collar, tie, belt or waistband
- Rinse mouth with water
- Get medical attention immediately

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.

Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 °C. Store under nitrogen. Light sensitive. Heat sensitive.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

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

Personal protective equipment

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

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 should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid
Odor:	No Data
pH:	No Data
Melting point:	range: 218 °C
Flashpoint:	No Data
Evaporation rate:	No Data

10. STABILITY AND REACTIVITY

Reactivity:

No data available

Chemical stability:

No data available.

Possibility of hazardous reactions:

No data available

Conditions to avoid: No data available**Incompatible materials:**

Water, Strong oxidizing agents

Hazardous decomposition products/other decomposition products: No data available

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity: No data available

Persistence and degradability: No data available

Bio-accumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: No data available

Other adverse effects: No data available

