

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Revision Date

07.07.2010

1. Identification of the substance/mixture and of the company/undertaking

Product Information

Catalogue No.:	851087
Product name:	PyClock 6-Chloro-benzotriazole-1-yloxy-tris-pyrrolidinophosphonium hexafluorophosphate
Use of the Substance/Mixture	Chemical for synthesis
Company:	Merck KGaA * 64271 Darmstadt * Germany * Phone:+49 6151 72-0
Emergency telephone:	Please contact the regional company representation in your country.
Responsible/issuing person:	LS-QHC * e-mail: prodsafe@merckgroup.com

2. Hazards identification

This substance is not classified as dangerous according to European Union legislation.

3. Composition/information on ingredients

Formula	$C_{18}H_{27}ClF_6N_6OP_2$ (Hill)
CAS-No.	893413-42-8
Molar mass	554,84 g/mol

4. First aid measures

After inhalation: fresh air. Consult doctor if feeling unwell.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist if necessary.

After swallowing: immediately make victim drink water (two glasses at the most). Consult a physician.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO₂), Dry powder, Foam

Specific hazards during fire fighting

Combustible material, Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

Hydrogen fluoride, nitrogen oxides, Oxides of phosphorus, Hydrogen chloride gas

Special protective equipment for fire-fighters

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Catalogue No.: 851087
Product name: PyClock 6-Chloro-benzotriazole-1-yloxy-tris-pyrrolidinophosphonium
hexafluorophosphate

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

Personal precautions

Avoid substance contact. Avoid generation of dusts; do not inhale dusts. Ensure adequate ventilation.

Environmental precautions

Do not empty into drains.

Methods for cleaning up

Take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts.

7. Handling and storage

Handling

Advice on safe handling

Observe label precautions.

Storage

Further information on storage conditions

Tightly closed. Dry.

Store at +2°C to +8°C.

8. Exposure controls/personal protection

Personal protective equipment

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

Hand protection

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example. KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Catalogue No.: 851087
Product name: PyClock 6-Chloro-benzotriazole-1-yloxy-tris-pyrrolidinophosphonium
hexafluorophosphate

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Eye protection

Safety glasses

Protective measures

Protective suit

Hygiene measures

Change contaminated clothing. Application of skin- protective barrier cream recommended.

Wash hands after working with substance.

9. Physical and chemical properties

Form	crystalline
Colour	off-white
pH	no data available
Viscosity, dynamic	no data available
Melting point	165 - 175 °C
Boiling point	no data available
Ignition temperature	no data available
Flash point	no data available
Oxidizing properties	no data available
Flammability	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Relative vapour density	no data available
Density	no data available
Solubility/qualitative	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Evaporation rate	no data available

Catalogue No.: 851087
Product name: PyClock 6-Chloro-benzotriazole-1-yloxy-tris-pyrrolidinophosphonium
hexafluorophosphate

10. Stability and reactivity

Conditions to avoid

no information available

Materials to avoid

Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitosamines!

Violent reactions possible with:

Strong oxidizing agents, Acids, Bases

Hazardous decomposition products

in the event of fire: See chapter 5.

Further information

The following applies in general to flammable organic substances and preparations: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

11. Toxicological information

Further information

Quantitative data on the toxicity of this product are not available.

Further toxicological data:

Hazardous properties cannot be excluded.

Other information

Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

Additional ecological information

Ecotoxicity effects

We have no quantitative data concerning the ecological effects of this product.

Further information on ecology

Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Product

Chemicals must be disposed of in compliance with the respective national regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.

Packaging

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under www.retrologistik.de you will find special information on the respective national conditions as well as contact partners.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006

Catalogue No.: 851087
Product name: PyClock 6-Chloro-benzotriazole-1-yloxy-tris-pyrrolidinophosphonium
hexafluorophosphate

15. Regulatory information

GHS-Labeling

Not a dangerous substance according to GHS.

CAS-No. 893413-42-8

Labelling according to EC Directives

The test results available so far do not permit a complete evaluation. Risks cannot be excluded if the product is handled inappropriately.

Further information

Caution - substance not yet fully tested.

National legislation

Storage class VCI: 10 - 13 Other liquids and solids

Major Accident Hazard 96/82/EC Update: 2003

Legislation: Directive 96/82/EC does not apply

16. Other information

Regional representation: This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.