## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

HFIPA

**Further trade names**

1,1,1,3,3,3-Hexafluoro-2-propanol
1,1,1,3,3,3-Hexafluoropropan-2-ol
1,1,1,3,3,3-Hexafluoroisopropanol

CAS No: 920-66-1
EC No: 213-059-4

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Use of the substance/mixture**

Laboratory chemical, Manufacture of the substance

**Uses advised against**

Do not use for private purposes (household).

### 1.3. Details of the supplier of the safety data sheet

Company name: Iris Biotech GmbH
Street: Adalbert-Zoellner-Straße 1
Place: D-95615 Marktredwitz, Germany
Post-office box: 568
D-95605 Marktredwitz, Germany
Telephone: +49 9231 97121 0 Telefax: +49 9231 97121 99
e-mail: info@iris-biotech.de
Contact person: Compliance Department Telephone: +49 9231 97121 0
e-mail: sds@iris-biotech.de
Internet: www.iris-biotech.de
Responsible Department: Only available during office hours.

### 1.4. Emergency telephone number:

+49 (0)89 19240 (POISON CENTER Munich: 24 h)

**Further Information**

Emergency telephone: 24 h

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**GB CLP Regulation**

Hazard categories:
Reproductive toxicity: Repr. 2
Acute toxicity: Acute Tox. 4
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Corr. 1B
Hazard Statements:
Causes severe skin burns and eye damage.
Harmful in contact with skin.
Harmful if swallowed.
Suspected of damaging fertility or the unborn child.

### 2.2. Label elements

**GB CLP Regulation**

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

| | |
|---|---|
| H302+H312 | Harmful if swallowed or in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H361 | Suspected of damaging fertility or the unborn child. |

**Precautionary statements**

| | |
|---|---|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER/doctor. |

**Special labelling of certain mixtures**

Restricted to professional users.

**Additional advice on labelling**

Warning - substance not yet tested completely.

## 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# SECTION 3: Composition/information on ingredients

## 3.1. Substances

**Chemical characterization**

1,1,1,3,3,3-Hexafluoropropan-2-ol

Sum formula: C3H2F6O

Molecular weight: 168,04 g/mol

**Hazardous components**

| CAS No | Chemical name | | | Quantity |
|---|---|---|---|---|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| 920-66-1 | HFIPA | | | <= 100 % |
| | 213-059-4 | | 01-2120752204-63-XXXX | |
| | Repr. 2, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B; H361 H312 H302 H314 | | | |

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

| CAS No | EC No | Chemical name | Quantity |
|---|---|---|---|
| | Specific Conc. Limits, M-factors and ATE | | |
| 920-66-1 | 213-059-4 | HFIPA | <= 100 % % |
| | inhalation: LC50 = 1974 mg/l (vapours); dermal: LD50 = 1400 mg/kg; oral: LD50 = 1500 mg/kg | | |

# SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated, saturated clothing immediately. Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

**After inhalation**

Provide fresh air. Medical treatment necessary. Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.
In all cases of doubt, or when symptoms persist, seek medical advice.
If unconscious but breathing normally, place in recovery position and seek medical advice.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary. After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately.
In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting. Provide fresh air.
In all cases of doubt, or when symptoms persist, seek medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

Refer to chapter 11.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. Water spray. alcohol resistant foam. Dry extinguishing powder. Carbon dioxide ($CO_2$). Sand.

**Unsuitable extinguishing media**

High power water jet.

### 5.2. Special hazards arising from the substance or mixture

Non-flammable. Thermal decomposition can lead to the escape of irritating gases and vapours.
In case of fire may be liberated: Carbon dioxide ($CO_2$). Carbon monoxide (CO). Fluorhydric acid.

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Usual measures for fire prevention.

## SECTION 6: Accidental release measures

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

**General measures**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear personal protection equipment.
In case of fire: Evacuate area.
Evacuate the danger area, observe emergency procedures, consult an expert.

### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil.
Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation.
Clear contaminated areas thoroughly.

### 6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13
Treat the recovered material as prescribed in the section on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid contact with skin, eyes and clothes.
Use extractor hood (laboratory).

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Provide adequate ventilation. When using do not eat, drink or smoke. Wash hands before breaks and after work.

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

**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep container tightly closed in a cool, well-ventilated place.
Keep only in original packaging.
Containers which are opened carefully and kept upright to prevent leakage.
storage temperature: room temperature

**Hints on joint storage**

No special measures are necessary.

### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Additional advice on limit values**

Store in a well-ventilated place. Keep cool.

### 8.2. Exposure controls

**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Suitable eye protection: goggles. Wear eye/face protection.
Precautions for safe handling: Safety shower and eye bath.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wear suitable gloves.
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
Wash hands before breaks and after work.

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

**Environmental exposure controls**

Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state: | liquid |
| Colour: | colourless |
| Odour: | high |

**Changes in the physical state**

| | |
|---|---|
| Melting point/freezing point: | -4 °C |
| Boiling point or initial boiling point and boiling range: | 59 °C |
| Sublimation point: | No data available |

| | |
|---|---|
| Softening point: | No data available |
| : | No data available |
| Flash point: | > 100 °C |

**Flammability**

| | |
|---|---|
| Solid/liquid: | not applicable |
| Gas: | not applicable |

**Explosive properties**

The product is not: Explosive.

| | |
|---|---|
| Lower explosion limits: | No data available |
| Upper explosion limits: | No data available |
| Auto-ignition temperature: | > 550 °C |

**Self-ignition temperature**

| | |
|---|---|
| Solid: | No data available |
| Gas: | No data available |
| Decomposition temperature: | No data available |

**Oxidizing properties**

No data available

| | |
|---|---|
| pH-Value: | 3-4 |
| Viscosity / dynamic: (at 20 °C) | 1,65 mPa·s |
| Viscosity / kinematic: | No data available |
| Flow time: | No data available |
| Water solubility: | completely miscible |

**Solubility in other solvents**

Acetone, Ether

| | |
|---|---|
| Partition coefficient n-octanol/water: | Log Pow: 1,66 |
| Vapour pressure: (at 20 °C) | 160 hPa |
| Vapour pressure: (at 30 °C) | 266 hPa |
| Density: | 1,596 g/cm³ |
| Relative vapour density: | No data available |

## 9.2. Other information

**Information with regard to physical hazard classes**

| | |
|---|---|
| Sustaining combustion: | No data available |

**Other safety characteristics**

| | |
|---|---|
| Solvent separation test: | No data available |
| Solvent content: | 100,00 % |
| Solid content: | not determined |
| Evaporation rate: | No data available |

**Further Information**

## SECTION 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

Protect from moisture.
Keep away from heat.

### 10.5. Incompatible materials

Oxidizing agents, strong. Acid, concentrated. Alkalis (alkalis), concentrated. Aluminium. Alkali metals. Zink

### 10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.
In case of fire may be liberated: Carbon dioxide ($CO_2$). Carbon monoxide (CO). Fluorhydric acid.

**Further information**

In case of fire: See chapter 5.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in GB CLP Regulation

**Toxicocinetics, metabolism and distribution**

No data available

**Acute toxicity**

Harmful if swallowed.
Harmful in contact with skin.
Eye contact.: Mydriasis
Damage of respiratory tract.: Dyspnoe
blood disorders

| CAS No | Chemical name | | | | |
|---|---|---|---|---|---|
| | Exposure route | Dose | Species | Source | Method |
| 920-66-1 | HFIPA | | | | |
| | oral | LD50 1500 mg/kg | Rat | | |
| | dermal | LD50 1400 mg/kg | Rabbit | | |
| | inhalation (4 h) vapour | LC50 1974 mg/l | Rat | | |

**Irritation and corrosivity**

Causes severe skin burns and eye damage.
Causes serious eye damage.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of damaging fertility or the unborn child. (HFIPA)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
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.

Germ cell mutagenicity:
Gene mutation (revertant): Salmonella typhimurium
Result: negative

Reproductive toxicity:
Reproductive toxicity - Rat: male/ female
Evidence exists for human reproductive toxicity.
Developmental toxicity/teratogenicity - Rat: male/ female - oral

**STOT-single exposure**
Based on available data, the classification criteria are not met.

**STOT-repeated exposure**
Based on available data, the classification criteria are not met.

**Aspiration hazard**
Based on available data, the classification criteria are not met.

**Specific effects in experiment on an animal**
Evidence for reproductive toxicity in experimental animals.

**Additional information on tests**
Special hazards arising from the substance or mixture. Classification according to Regulation (EC) No 1272/2008 [CLP]: health hazard properties.

**Practical experience**
No data available

### 11.2. Information on other hazards

**Other information**
Chronic oral toxicity Rat: male/ female - oral: NOAEL(C): 60 mg/kg

**Further information**
RTECS: UB6450000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Coughing. shortage of breath. Headache. Nausea.

Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated.
Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

### 12.1. Toxicity

920-66-1 HFIPA
Acute (short-term) fish toxicity Oryzias latipes (Ricefish): 48 h - LC50: 270 mg/l

| CAS No | Chemical name | | | | | | |
|---|---|---|---|---|---|---|---|
| | Aquatic toxicity | Dose | | [h] \| [d] | Species | Source | Method |
| 920-66-1 | HFIPA | | | | | | |
| | Acute fish toxicity | LC50 | 244 mg/l | 96 h | Pimephales promelas | | |
| | Acute algae toxicity | ErC50 mg/l | > 100 | 72 h | Pseudokirchneriella subcapitata | Study report (2017) | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 mg/l | > 100 | 48 h | Daphnia magna | Study report (2017) | OECD Guideline 202 |

### 12.2. Persistence and degradability

| CAS No | Chemical name | | | |
|---|---|---|---|---|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 920-66-1 | HFIPA | | | |
| | Total organic carbon (TOC): | 0 % | | |
| | OECD 301C/ ISO 9408/ EEC 92/69/V, C.4-F | 0 - 5 % | 28 | (External SDS) |
| | Not readily biodegradable (according to OECD criteria) | | | |

### 12.3. Bioaccumulative potential

**Partition coefficient n-octanol/water**

| CAS No | Chemical name | Log Pow |
|---|---|---|
| 920-66-1 | HFIPA | 1,5 |

**BCF**

| CAS No | Chemical name | BCF | Species | Source |
|---|---|---|---|---|
| 920-66-1 | HFIPA | >= 1,1 | Cyprinus carpio | Study report (1985) |

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.7. Other adverse effects

Warning - substance not yet tested completely.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.
Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation.
Consult the appropriate local waste disposal expert about waste disposal.

**Contaminated packaging**

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

| | |
|---|---|
| **14.1. UN number:** | UN 3265 |
| **14.2. UN proper shipping name:** | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (1,1,1,3,3,3-Hexafluoropropan-2-ol) |
| **14.3. Transport hazard class(es):** | 8 |
| **14.4. Packing group:** | II |
| Hazard label: | 8 |


| | |
|---|---|
| Classification code: | C3 |
| Special Provisions: | 274 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |
| Transport category: | 2 |
| Hazard No: | 80 |
| Tunnel restriction code: | E |

**Inland waterways transport (ADN)**

| | |
|---|---|
| **14.1. UN number:** | UN 3265 |
| **14.2. UN proper shipping name:** | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (1,1,1,3,3,3-Hexafluoropropan-2-ol) |
| **14.3. Transport hazard class(es):** | 8 |
| **14.4. Packing group:** | II |
| Hazard label: | 8 |


| | |
|---|---|
| Classification code: | C3 |
| Special Provisions: | 274 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |

**Marine transport (IMDG)**

| | |
|---|---|
| **14.1. UN number:** | UN 3265 |
| **14.2. UN proper shipping name:** | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (1,1,1,3,3,3-Hexafluoropropan-2-ol) |
| **14.3. Transport hazard class(es):** | 8 |
| **14.4. Packing group:** | II |
| Hazard label: | 8 |


| | |
|---|---|
| Special Provisions: | 274 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |
| EmS: | F-A, S-B |

**Air transport (ICAO-TI/IATA-DGR)**

| | |
|---|---|
| **14.1. UN number:** | UN 3265 |

**14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (1,1,1,3,3,3-Hexafluoropropan-2-ol)

**14.3. Transport hazard class(es):** 8

**14.4. Packing group:** II

Hazard label: 8


| | |
|---|---|
| Special Provisions: | A3 A803 |
| Limited quantity Passenger: | 0.5 L |
| Passenger LQ: | Y840 |
| Excepted quantity: | E2 |
| IATA-packing instructions - Passenger: | 851 |
| IATA-max. quantity - Passenger: | 1 L |
| IATA-packing instructions - Cargo: | 855 |
| IATA-max. quantity - Cargo: | 30 L |

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: strongly corrosive.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

| | |
|---|---|
| 2010/75/EU (VOC): | 100 % (1596 g/l) |
| 2004/42/EC (VOC): | 100 % (1596 g/l) |
| Information according to 2012/18/EU (SEVESO III): | Not subject to 2012/18/EU (SEVESO III) |

**Additional information**

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

**National regulatory information**

| | |
|---|---|
| Employment restrictions: | Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. |
| Water hazard class (D): | 2 - obviously hazardous to water |
| Skin resorption/Sensitization: | Permeates easily through outer skin and causes poisoning. |

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

**Abbreviations and acronyms**

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

**Relevant H and EUH statements (number and full text)**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H302+H312 | Harmful if swallowed or in contact with skin. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H361 | Suspected of damaging fertility or the unborn child. |

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.
Warning - substance not yet tested completely.
The product is intended for research, analysis and scientific education.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.
The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.