

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCES/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. Product Identifiers**
Product Code(s) HB0222
Product Name Cypermethrin
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Recommended use For research use only – Not for human use
Uses advised against No information available
- 1.3. Details of the supplier of the safety data sheet**
Supplier

HelloBio Ltd
Unit 3 IO Centre
Cabot Park
Moorend Farm Avenue
Avonmouth
Bristol
BS 11 0QL
UK
Tel: +44 (0)117 318 0505
Fax: +44 (0)1179 811 601

For further information, please contact: technicalsupport@hellobio.com
- 1.4. Emergency Telephone number**
Emergency telephone - Tel: +44 (0)117 318 0505

2. HAZARDS IDENTIFICATION

- 2.1. Classification of the substance or mixture**
GHS/CLP – REGULATION (EC) No 1272/2008
Acute toxicity, (Category 4) H302: Harmful if swallowed.
Acute toxicity, (Category 4) H332: Harmful if inhaled.
Skin irritation, (Category 2) H315: Causes skin irritation.
Skin sensitization, (Category 1) H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, (Category 3), respiratory system H335: May cause respiratory irritation.

Specific target organ toxicity -repeated exposure, (Category 2), Nervous system

H373: May cause damage to organs

through prolonged or repeated exposure.

Short-term (acute) aquatic hazard, (Category 1) H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, (Category 1)

H410: Very toxic to aquatic life with long lasting effects.

2.2. Label Elements



Signal Word

Warning

Hazard Statements

H302 + H332 Harmful if swallowed or if inhaled

H317 May cause an allergic skin reaction

H335 May cause respiratory irritation

H373 May cause damage to organs (Nervous system) through prolonged or repeated exposure

H400 Very toxic to aquatic life with long lasting effects

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P273 Avoid release to the environment.

P280 Wear protective gloves.

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

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

P314 Get medical advice/ attention if you feel unwell.

Other hazards

Caution – substance not yet completely tested

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1.	Substances	
	Product Name:	Cypermethrin
	EC Number	52315-07-8
	Index number	607-421-00-4

Synonyms:

Formula:

$C_{22}H_{19}Cl_2NO_3$

Molecular Weight: 416.3

CAS Number

52315-07-8

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

If symptoms persist, call a physician.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Ingestion

Rinse mouth. If symptoms persist, call a physician

Inhalation

Move to fresh air. If symptoms persist, call a physician.

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

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

4.3. Indication of immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

In combustion, may emit toxic fumes.

5.3. Precautions for fire-fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing – see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapours, mist, dust or gas.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10%

caustic solution and ventilate area until disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4. Reference to other sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2. Conditions for safe storage, including any incompatibilities.

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Recommended storage temperature: Store at +4°C

7.3. Specific end uses

Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Appropriate engineering controls

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Personal protective equipment

Eye/face protection

Use appropriate safety glasses.

Skin protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body protection

Wear appropriate protective clothing.

Respiratory protection

If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Yellow/brown liquid/solid	Vapour pressure	No data available
Odour	No data available	Vapour density	No data available
Odour threshold	No data available	Relative density	No data available
pH	No data available	Solubility(ies)	ethanol (25mg/ml) or DMSO
Melting/freezing point	No data available	Partition coefficient	No data available

Boiling point/range	No data available	Auto-ignition temperature	No data available
Flash Point	No data available	Decomposition temperature	No data available
Evaporation rate	No data available	Viscosity	No data available
Flammability (solid, gas)	No data available	Explosive properties	No data available
Upper/lower flammability or explosive limits	No data available	Oxidising properties	No data available

9.2. Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended transport or storage conditions.

10.2. Chemical Stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Heat, moisture

10.5. Incompatible materials

Strong acids/alkalis, strong oxidising/reducing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Phosphorous oxides.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Inhalation No Information available

Eye contact No Information available

Skin contact Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Ingestion Acute toxicity estimate Oral - 500 mg/kg (Acute toxicity estimate according to Regulation (EC) No. 1272/2008)
(Acute toxicity estimate according to Regulation (EC) No. 1272/2008) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
The value is given in analogy to the following substances: α-Cypermethrin LD50 Dermal - Rabbit - 2,460 mg/kg Remarks: (RTECS) Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation. Behavioral:Tremor.

Chronic toxicity

Corrosivity	No Information available
Sensitization	Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Neurological effects	No Information available
Reproductive toxicity	No Information available
Mutagenic effects	No Information available

Target Organ Effects

Specific target organ toxicity - single exposure May cause respiratory irritation.
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) The value is given in analogy to the following substances: α -Cypermethrin

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure. - Nervous system
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

12. ECOLOGICAL INFORMATION

12.1. Toxicity Ecotoxicity effects

Toxicity to fish

static test LC50 - Cyprinodon sp. (minnow) - 0.00265 mg/l - 96 h
Remarks: (ECOTOX Database) The value is given in analogy to the following substances: α Cypermethrin

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)
static test NOEC - Daphnia magna (Water flea) - 0.0003 mg/l - 7 d
Remarks: (ECOTOX Database)

12.2. Persistence and degradability

No Information available

12.3. Bioaccumulative potential

Salmo salar (Atlantic salmon) - 96 h - 1.4 μ g/l(Cypermethrin)
Bioconcentration factor (BCF): 7.1

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment

No Information available

12.6. Other adverse effects

No Information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other information

According to the European Waste Catalogue. Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

ADR

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cypermethrin)
Hazard Class	9
UN/ID No	3077
Packing Group	III

IATA

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cypermethrin)
Hazard Class	9
UN/ID No	3077
Packing Group	III

DOT

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cypermethrin)
Hazard Class	9
UN/ID No	3077
Packing Group	III

15. REGULATORY INFORMATION

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

No information available

15.2. Chemical Safety Assessment

No information available

16. OTHER INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation , disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless stated in the text.