

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

Product name : Cyhalofop-butyl

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Acute toxicity, Oral (Category 4)

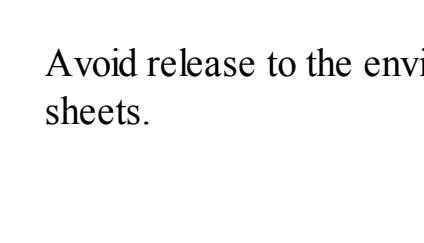
Acute aquatic toxicity (Category 1)

According to European Directive 67/548/EEC as amended.

Harmful if swallowed. Very toxic to aquatic organisms.

Label elements

Pictogram



Signal word : Warning

Hazard statement(s)

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

Precautionary statement(s)

P273 Avoid release to the environment.

Hazard symbol(s)

Xn Harmful

N Dangerous for the environment

R-phrase(s)

R22 Harmful if swallowed.

R50 Very toxic to aquatic organisms.

S-phrase(s)

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Butyl (R)-2-[4-(4-cyano-2-fluorophenoxy)phenoxy]propionate

Formula : C₂₀H₂₀FN₄O₄

Molecular Weight : 357,38 g/mol

CAS-No.	EC-No.	Classification	Concentration
Cyhalofopbutyl 122008-85-9	-	Acute Tox. 4; Aquatic Acute 1; H302, H400 Xn, N, R22 - R50	-

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

4. 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.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

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.

Methods and materials for containment and cleaning up

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

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

Eye protection

Safety glasses with side-shields conforming to EN166

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : crystalline

Colour : white

Odour : characteristic

Safety data

pH : 6,7 at 23 °C

Melting point : 48 - 50 °C

Boiling point : > 270 °C

Flash point : 122 °C - closed cup

Ignition temperature : no data available

Lower explosion limit : no data available

Upper explosion limit : no data available

Vapour pressure : 530 hPa

Density : 1,172 g/cm³ at 20 °C

Water solubility : 0,00044 g/l at 20 °C

Partition coefficient: log Pow: 3,316 at 25 °C

n-octanol/water

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Water, Acids and bases

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x).

Hydrogen fluoride

Thermal decomposition

> 270 °C

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 1.611,7 mg/kg

LC50 Inhalation - rat - > 5,63 mg/l

LD50 Dermal - rat - > 2.000 mg/kg

Skin corrosion/irritation

Serious eye damage/eye irritation

Eyes - rabbit -

Remarks: slight irritation

Respiratory or skin sensitization

Guinea pig -

Remarks: Will not occur

Gen cell mutation

Genetic toxicity

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.

WHO: No data available

EU: No data available

OSHA: No data available

MSDS: No data available

NIOSH: No data available

NIH: No data available

ICR: No data available