

## Chemical Safety Data Sheet MSDS / SDS

## Fenvalerate

Revision Date:2026-05-31 Revision Number:1

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

## Product identifier

Product name : Fenvalerate  
CBnumber : CB7281563  
CAS : 51630-58-1  
EINECS Number : 257-326-3  
Synonyms : fenvalerate,fenvalerat

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

## Company Identification

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

## SECTION 2: Hazards identification

## GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Danger

## Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P302+P352 IF ON SKIN: wash with plenty of soap and water.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P273 Avoid release to the environment.

P264 Wash skin thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

## Hazard statements

H410 Very toxic to aquatic life with long lasting effects

H335 May cause respiratory irritation

H319 Causes serious eye irritation

H315 Causes skin irritation

H301 Toxic if swallowed

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## SECTION 3: Composition/information on ingredients

### Substance

Product name	: Fenvalerate
Synonyms	: fenvalerate,fenvalerat
CAS	: 51630-58-1
EC number	: 257-326-3
MF	: C <sub>25</sub> H <sub>22</sub> ClNO <sub>3</sub>
MW	: 419.9

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## SECTION 4: First aid measures

### General advice

Show this safety data sheet to the doctor in attendance.

### If inhaled

After inhalation: fresh air.

### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

### 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

### Protection of first-aiders

For personal protection see section 8.

### Notes to physician

No data available

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## SECTION 5: Firefighting measures

### Suitable extinguishing media

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### Specific hazards during fire fighting

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

### Hazardous combustion products

Carbon oxides Nitrogen oxides (NO<sub>x</sub>) Hydrogen chloride gas

### Specific extinguishing methods

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

### Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

### Environmental precautions

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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## SECTION 7: Handling and storage

### Handling

For precautions see section 2.2.

### Storage

#### Further information on storage conditions

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

**Storage class**

6.1C, Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

**Recommended storage temperature**

Recommended storage temperature see product label.

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## SECTION 8: Exposure controls/personal protection

**control parameter****Hazard composition and occupational exposure limits**

Does not contain substances with occupational exposure limits.

**Engineering measures**

No data available

**Personal protective equipment****Respiratory protection**

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Recommended Filter type**

Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses

**Skin and body protection**

protective clothing

**Hand protection****Material**

Nitrile rubber

**Break through time**

480 min

**Glove thickness**

0.11 mm

**Protective index**

Full contact

**Manufacturer**

KCL 741 L

**Material**

Nitrile rubber

**Break through time**

480 min

**Glove thickness**

0.11 mm

**Protective index**

Splash contact

**Manufacturer**

KCL 741 L

**Remarks**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D- 36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

**Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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## SECTION 9: Physical and chemical properties

**Information on basic physicochemical properties**

solid

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**Color**

Off-white to light yellow

**Odor**

No data available

**Odor Threshold**

No data available

**pH**

No data available

**Melting point/ range**

No data available

**Boiling point/boiling range**

300°C

**Flash point**

Not applicable

**Evaporation rate**

No data available

**Flammability (solid, gas)**

No data available

**Flammability (liquids)**

No data available

**Burning rate**

No data available

**Upper explosion limit / Upper flammability limit**

No data available

**Lower explosion limit / Lower flammability limit**

No data available

**Vapor pressure**

$1.92 \times 10^{-5}$  Pa (20 °C)

**Relative vapor density**

No data available

**Relative density**

d<sub>23</sub> 1.17

**Density**

d<sub>23</sub> 1.17

**Water solubility**

practically insoluble

**Partition coefficient: n-octanol/water**

log Pow: 4.42

**Autoignition temperature**

No data available

**Decomposition temperature**

No data available

**Viscosity, dynamic**

No data available

**Viscosity, kinematic**

No data available

**Flow time**

No data available

**Explosive properties**

No data available

### **Oxidizing properties**

none

### **Molecular weight**

419.90 g/mol

### **Particle characteristics Particle size**

No data available

### **Solubility**

DMSO:1.0(Max Conc. mg/mL);2.38(Max Conc. mM)

DMF:30.0(Max Conc. mg/mL);71.44(Max Conc. mM)

Ethanol:5.0(Max Conc. mg/mL);11.91(Max Conc. mM)

### **Physical state**

Solid

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## SECTION 10: Stability and reactivity

### **Reactivity**

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

### **Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

### **Possibility of hazardous reactions**

Violent reactions possible with: Strong oxidizing agents Acids Bases

### **Conditions to avoid**

no information available

### **Incompatible materials**

No data available

### **Hazardous decomposition products**

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - Rat - 70.2 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation.

Behavioral:Excitement.

Behavioral:Ataxia.

(RTECS)

Inhalation: Irritating to respiratory system.

LD50 Dermal - Rabbit - > 2,000 mg/kg

Remarks: (RTECS)

**Skin corrosion/irritation**

Remarks: Causes skin irritation.

**Serious eye damage/eye irritation**

Remarks: Causes serious eye irritation.

**Respiratory or skin sensitization**

Classified based on available data. For more details, see section 2

**Germ cell mutagenicity**

Classified based on available data. For more details, see section 2

**Carcinogenicity**

Classified based on available data. For more details, see section 2

**Reproductive toxicity**

Classified based on available data. For more details, see section 2

**Specific target organ toxicity - single exposure**

May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**

Classified based on available data. For more details, see section 2

**Aspiration hazard**

Classified based on available data. For more details, see section 2

**11.2 Additional Information**

RTECS: CY1576350

Nausea, Vomiting, Dizziness, Aspiration or inhalation may cause chemical pneumonitis., MTBE (methyl-tert-butyl ether) is reported to metabolize to tert-butyl alcohol and formaldehyde by microsomal demethylation, In another unpublished study MTBE was shown to be carcinogenic due to "increased incidence of a rare type of kidney tumor" in male rats and an "increase in the incidence of hepatocellular adenomas" in female mice.

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

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## SECTION 12: Ecological information

### Ecotoxicity

#### Components:

#### Cyano (3-phenoxybenzyl)-2-(4-chlorophenyl)-3-methylbutyrate:

### **Toxicity to fish**

LC50 (Pimephales promelas (fathead minnow)): 0.00099 mg/l End point: mortality Exposure time: 96 h Test Type: static test Remarks: (ECOTOX Database)

### **M-Factor (Acute aquatic toxicity)**

1,000

### **Toxicity to fish (Chronic toxicity)**

NOEC (Pimephales promelas (fathead minnow)): 0.000668 mg/l End point: mortality Exposure time: 7 d Remarks: (ECOTOX Database)

### **Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**

NOEC (Daphnia magna (Water flea)): 0.0003 mg/l End point: reproduction rate Exposure time: 9 d Test Type: static test Remarks: (ECOTOX Database)

### **M-Factor (Chronic aquatic toxicity)**

100

### **Persistence and degradability**

No data available

### **Bioaccumulative potential**

### **Components:**

#### **Cyano (3-phenoxybenzyl)-2-(4-chlorophenyl)-3-methylbutyrate:**

#### **Partition coefficient: noctanol/water**

log Pow: 4.42

### **Mobility in soil**

No data available

### **Other adverse effects**

### **Components:**

#### **Cyano (3-phenoxybenzyl)-2-(4-chlorophenyl)-3-methylbutyrate:**

#### **Additional ecological information**

Discharge into the environment must be avoided.

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## SECTION 13: Disposal considerations

### **Disposal methods**

#### **Waste from residues**

Offer surplus and non-recyclable solutions to a licensed disposal company.

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## SECTION 14: Transport information

### **International Regulations**

## **IATA-DGR**

UN/ID No. : UN 2811

Proper shipping name : Toxic solid, organic, n.o.s.

(Cyano (3-phenoxybenzyl)-2-(4-chlorophenyl)-3methylbutyrate)

Class : 6.1

Packing group : III

Labels : Division 6.1 - Toxic substances

Packing instruction (cargo aircraft) : 677

Packing instruction (passenger aircraft) : 670

## **IMDG-Code**

UN number : UN 2811

Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S.

(Cyano (3-phenoxybenzyl)-2-(4-chlorophenyl)-3methylbutyrate)

Class : 6.1

Packing group : III

Labels : 6.1

EmS Code : F-A, S-A

Marine pollutant : yes

## **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

## **National Regulations**

### **JT/T 617**

UN number : UN 2811

Proper shipping name : TOXIC SOLID, ORGANIC, N.O.S.

(Cyano (3-phenoxybenzyl)-2-(4-chlorophenyl)-3methylbutyrate)

Class : 6.1

Packing group : III

Labels : 6.1

Environmentally hazardous : no

## **Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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## **SECTION 15: Regulatory information**

### **National regulatory information**

## Law on the Prevention and Control of Occupational Diseases

## Regulations on Safety Management of Hazardous Chemicals

## Catalogue of Hazardous Chemicals

## Hazardous Chemicals for Priority Management

Not applicable under SAWS

## Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

## China Severely Restricted Toxic Chemicals for Import and Export

Not applicable

## Regulation on the Administration of Precursor Chemicals

## Catalogue and Classification of Precursor Chemicals

Not listed

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## SECTION 16: Other information

### Full text of other abbreviations

#### GBZ 2.1-2007

Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

**GBZ 2.1-2007 / PC-TWA AIC** - Australian Invent Transport by Land of Bra bw - Body weight; **CMR Standard of the German List (Canada)**; **ECx** - Conc associated with x%respo Chemical Substances (Jap response); **ERG** - Emerge GLP - Good Laboratory P cer; **IATA** - International Construction and Equipm Half maximal inhibitory c tion; **IECSC** - Inventory o tional Maritime Dangerous Industrial Safety and H Standardization; **KECI** - K tration to 50 % of a test (Median Lethal Dose); **MA lution from Ships**; **n.o.s.** No Observed (Adverse) E fect Level; **NOELR** - No Norm; **NTP** - National Toxi icals; **OECD** - Organizatio fice of Chemical Safety a and Toxic substance; **PIC stances**; **(Q)SAR** - (Quant (EC) No 1907/2006 of th Registration, Evaluation, Accelerating Decompositi Chemical Substance Inve Thailand Existing Chemical States); **UN** - United Nat Transport of Dangerous **WHMIS** - Workplace Hazar

Permissible concentration - time weighted average ry of Industrial Chemicals

**ANTT** - National Agency for il

**ASTM** - American Society for the Testing of Materials

- Carcinogen, Mutagen or Reproductive Toxicant

**DIN** nstitute for Standardisation

**DSL** - Domestic Substances ntration associated with x% response

**ELx** - Loading rate se

**EmS** - Emergency Schedule

**ENCS** - Existing and New n)

**ErCx** - Concentration associated with x% growth rate cy Response Guide

**GHS** - Globally Harmonized System

actice

IARC - International Agency for Research on Cancer

IBC - International Code for the stowage, lashing and securing of cargo on board ships

IC50 - Inhalation Concentration

ICAO - International Civil Aviation Organization - Existing Chemical Substances in China

IMDG - International Maritime Dangerous Goods

IMO - International Maritime Organization

ISHL - International Safety Law (Japan)

ISO - International Organisation for Standardization - Existing Chemicals Inventory

LC50 - Lethal Concentration

LD50 - Lethal Dose to 50% of a test population

POL - International Convention for the Prevention of Pollution from Ships - Not Otherwise Specified

NCh - Chilean Norm

NO(A)EC - No Observed (Adverse) Effect Concentration

NO(A)EL - No Observed (Adverse) Effect Loading Rate

NOM - Official Mexican Standard

NZIoC - New Zealand Inventory of Chemicals for Economic Co-operation and Development

OPPTS - Office of Pollution Prevention and Control

PBT - Persistent, Bioaccumulative and Toxic - Philippines Inventory of Chemicals and Chemical Substances) Structure Activity Relationship

REACH - Regulation of the European Parliament and of the Council concerning the restriction of chemicals

SADT - Self-Heating Temperature

SDS - Safety Data Sheet

TCSI - Taiwan Chemical Safety Inventory

TDG - Transportation of Dangerous Goods

TECI - Toxic Chemicals Inventory

TSCA - Toxic Substances Control Act (United States)

UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

vPvB - Very Persistent and Very Bioaccumulative

HMIS - Hazardous Materials Information System

**Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.