

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 07 May 2025

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

1.1. Product name:

Benzovindiflupyr

1.1. Catalog No.:

688215

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
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contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Regulation (EC) No 1272/2008
Acute toxicity - Oral Category 3 - (H301)
Acute toxicity - Inhalation (Dusts/Mists) Category 3 - (H331)
Acute aquatic toxicity Category 1 - (H400)
Chronic aquatic toxicity Category 1 - (H410)

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2. Label elements
691-719-4
Signal word

Danger
Hazard statements
H301 - Toxic if swallowed
H331 - Toxic if inhaled
H410 - Very toxic to aquatic life with long lasting effects
Precautionary Statements - EU (§28, 1272/2008)
P264 - Wash face, hands and any exposed skin thoroughly after handling
P273 - Avoid release to the environment
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P391 - Collect spillage
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose of contents/ container to an approved waste disposal plant
2.3. Other hazards
No information available.
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.
Chemical name Benzovindiflupyr
EU - REACH (1907/2006) - Article 59(1)
- Candidate List of Substances of Very
High Concern (SVHC) for Authorisation
EU - REACH (1907/2006) - Endocrine
Disruptor Assessment List of
Substances

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Chemical name Benzovindiflupyr 1072957-71-1
Weight-% 100
REACH registrationnumber -
EC No 691-719-4
Classification according to Regulation (EC) No.1272/2008 [CLP] Acute Tox. 3 (H301 Acute Tox. 3 (H331)
Aquatic Acute 1
(H400)
Aquatic Chronic 1
(H410)

Specific concentration limit (SCL)
M-Factor 100
M-Factor (long-term) 100
Full text of H- and EUH-phrases: see section 16
Acute Toxicity Estimate
If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion
value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture
based on its components
Chemical name Benzovindiflupyr 1072957-71-1
Oral LD50 mg/kg 55
Dermal LD50 mg/kg 2000
Inhalation LC50 - 4 hour - dust/mist - mg/L No data available
Inhalation LC50 - 4 hour - vapour - mg/L No data available
Inhalation LC50 - 4 hour - gas - ppm No data available
This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No.
1907/2006 (REACH), Article 59)

3.1.1. Formula

C18H15Cl2F2N3O

3.1.2. Molecular Weight (g/mol)

398.23

3.1.3. CAS-No.

1072957-71-1

4. FIRST AID MEASURES

4.1. Description of first aid measures

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

Inhalation If breathing has stopped, give artificial respiration. Get medical attention immediately.

Remove to fresh air. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.

Skin contact Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor or poison control centre immediately

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information.

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

Symptoms Coughing and/ or wheezing. Difficulty in breathing.

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

Note to doctors Treat symptomatically

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

No information available

5.3. Advice for firefighters

Special protective equipment and precautions for fire fighters

Firefighters should wear self contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not breathe dust. Avoid generation of dust. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

Take off contaminated clothing and wash it before reuse.

General hygiene considerations Do not breathe dust. Take off contaminated clothing and wash it before reuse.

Contaminated work clothing should not be allowed out of the workplace. Regular cleaning

of equipment, work area and clothing is recommended. Wash hands before breaks and

immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not

eat, drink or smoke when using this product. Wash hands before breaks and after work.

Wear suitable gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Store locked up. Please refer to the manufacturers certificate for specific

storage and transport temperature conditions. Store only in the original receptacle unless

other advice is given on the CoA.

7.3. Specific end use(s)

Identified uses

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration

(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Hand protection The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

Duration of contact

PPE - Glove material Wear protective Viton(TM)

gloves

Glove thickness

Break through time

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not breathe dust. Take off contaminated clothing and wash it before reuse.

Contaminated work clothing should not be allowed out of the workplace. Regular cleaning

of equipment, work area and clothing is recommended. Wash hands before breaks and

immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not

eat, drink or smoke when using this product. Wash hands before breaks and after work.

Wear suitable gloves and eye/face protection.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Solid

Appearance Powder

Colour white

Odour Odourless.

Odour threshold No information available

Property Values Remarks o Method

Melting point / freezing point 148.4 °C None known

Boiling point / boiling range No data available None known

Flammability (solid, gas) No data available None known

Flammability Limit in Air None known

Upper flammability or explosive
limits

No data available

Lower flammability or explosive
limits

No data available

Flash point No data available None known

Autoignition temperature No data available None known

Decomposition temperature None known

pH No data available None known

pH (as aqueous solution) 6.9 No information available

Kinematic viscosity No data available None known

Dynamic viscosity No data available None known

Water solubility 0.98 mg/L None known

Solubility(ies) Chloroform, Methanol, slightly soluble

Partition coefficient 4.3 None known

Vapour pressure No data available None known

Relative density 1.466 None known

Bulk density No data available

Liquid Density No data available

Relative vapour density No data available None known

Particle characteristics

Particle Size No information available

Particle Size Distribution No information available

9.2. Other information

Molecular weight 398.23

Molecular formula C18 H15 Cl2 F2 N3 O

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics

No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity No information available.
10.2. Chemical stability
Stability Stable under normal conditions.
Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.
10.3. Possibility of hazardous reactions
Possibility of hazardous reactions None under normal processing.
10.4. Conditions to avoid
Conditions to avoid Excessive heat.
10.5. Incompatible materials
Incompatible materials None known based on information supplied.
Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Information on likely routes of exposure
Product Information
Inhalation Specific test data for the substance or mixture is not available. Toxic by inhalation. (based on components).
Eye contact Specific test data for the substance or mixture is not available.
Skin contact Specific test data for the substance or mixture is not available.
Ingestion Specific test data for the substance or mixture is not available. Toxic if swallowed. (based on components).
Symptoms related to the physical, chemical and toxicological characteristics
Symptoms Coughing and/ or wheezing. Difficulty in breathing.
Numerical measures of toxicity
Acute toxicity
Component Information
Chemical name Benzovindiflupyr
Oral LD50 = 55 mg/kg (Rat)
Dermal LD50 > 2000 mg/kg (Rat)
Inhalation LC50 > 0.56 mg/L (Rat) 4 h
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Skin corrosion/irritation No information available.
Serious eye damage/eye irritation No information available.
Respiratory or skin sensitisation No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available
11.2. Information on other hazards
11.2.1. Endocrine disrupting properties
Endocrine disrupting properties No information available.
11.2.2. Other information
Other adverse effects No information available

12. ECOLOGICAL INFORMATION

12.1. Toxicity
Ecotoxicity Very toxic to aquatic life with long lasting effects
Chemical name Benzovindiflupyr
Algae/aquatic plants
Fish LC50: =3.5ug/L (96h, Cyprinus carpio)
Toxicity to
microorganisms
Crustacea EC50 = 85 ug/L (48h, water fleas)

12.2. Persistence and degradability
Persistence and degradability No information available.
12.3. Bioaccumulative potential
Bioaccumulation There is no data for this product.
Component Information
Chemical name Partition coefficient
Benzovindiflupyr 4.3
12.4. Mobility in soil
Mobility in soil No information available.
12.5. Results of PBT and vPvB assessment
PBT and vPvB assessment No information available.
12.6. Endocrine disrupting properties
Endocrine disrupting properties No information available
12.7. 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. Dispose of waste in accordance with environmental legislation.
Contaminated packaging Do not reuse empty containers

14. TRANSPORT INFORMATION

IATA
14.1 UN number or ID number UN2588
14.2 UN proper shipping name Pesticide, solid, toxic, n.o.s. (Benzovindiflupyr)
14.3 Transport hazard class(es) 6.1
14.4 Packing group III
Description UN2588, Pesticide, solid, toxic, n.o.s. (Benzovindiflupyr), 6.1, III, Marine pollutant
14.5 Marine pollutant P
Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 61, 223, 274
EmS-No F-A, S-A No information available
14.7 Maritime transport in bulk according to IMO instruments
No information available
RID

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Water hazard class (WGK) strongly hazardous to water (WGK 3)
European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This

product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors

Not applicable

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

H2 ACUTE TOXIC

E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Chemical name Plant protection products directive (91/414/EEC)

Benzovindiflupyr 1072957 71 1 Plant protection agent

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment has been carried out for this substance

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!