

SAFETY DATA SHEET

Version:	1.1
Revision Date:	2016-09-13
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product Number:	P0169
Product name:	Pyraflufen-ethyl
CAS Registry Nr:	129630-19-9

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

Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the safety data sheet

Company:	Chemodex AG
	CH - 9000 St. Gallen
	Switzerland, Europe
	Tel: +41 71 244 48 25
	Fax: +41 71 244 48 26
	Email: info@chemodex.com
	Website: www.chemodex.com

1.4 Emergency telephone number

Tox Info Suisse:	+41 44 251 51 51
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SECTION 2: Hazards identification


2.1 Classification of the substance or mixture

Classification in accordance with (EC) No. 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 4)	
Skin corrosion (Category 1B)	
Chronic aquatic toxicity (Category 4)	

2.2 Label elements

Labelling according Regulation (EC) No. 1272/2008

Pictogram	
Signal word	Warning

Hazard statement(s)

H410	Very toxic to aquatic life with long lasting effects.
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Precautionary statement(s)

P273	Avoid release to the environment.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

Supplemental Hazard Statements:	none
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SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms:	Ethyl [2-chloro-5-(4-chloro-5-difluoromethoxy-1-methylpyrazol-3-yl)-4-fluorophenoxy]acetate
Mol. Formula:	C ₁₅ H ₁₃ Cl ₂ F ₃ N ₂ O ₄
Mol. Weight:	413.18 g/mol
CAS Registry No.:	129630-19-9

Component	Classification	Concentration
2-Chloro-5-(4-chloro-5-difluoromethoxy-1-methylpyrazol-3-yl)-4-fluorophenoxyacetic acid ethyl Ester CAS-No. 129630-19-9	-	-

SECTION 4: First aid measures

4.1 Description of 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.

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 any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures**5.1 Extinguishing media**

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas, Hydrogen fluoride

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

6.2 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.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: 2 - 8 °C
Store under inert gas.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

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8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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

Body Protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use

respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance:	Form: crystalline Colour: white
b)	Odour:	odourless
c)	Odour Threshold:	No data available
d)	pH:	No data available
e)	Melting point/freezing point:	Melting point/freezing point: 128 °C
f)	Boiling point	No data available
g)	Flash point:	No data available
h)	Evaporation rate:	No data available
i)	Flammability (solid, gas):	No data available
j)	Upper/lower flammability or explosive limits:	No data available
k)	Vapour pressure:	No data available
l)	Vapour density:	No data available
m)	Relative density:	
n)	Water solubility:	0,00008 g/l at 20 °C
o)	Partition coefficient (n-octanol/water):	log Pow: 3,49
p)	Auto-ignition temperature:	No data available
q)	Decomposition temperature:	No data available
r)	Viscosity:	No data available
s)	Explosive properties:	No data available
t)	Oxidizing properties:	No data available

9.2 Other information

Solubility in other solvents	Acetone 167 - 182 g/l at 20 °C Methanol 7,39 g/l at 20 °C
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SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - > 5.000 mg/kg

LC50 Inhalation - rat - 4 h - > 5,03 mg/l

Skin corrosion/irritation

Skin - rabbit - No skin irritation

Serious eye damage/eye irritation

Eyes - rabbit - Mild eye irritation

Respiratory or skin sensitisation

guinea pig - Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Genotoxicity in vitro - Not mutagenic in Ames Test.

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.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	Causes eye irritation.

Signs and Symptoms of Exposure

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

Additional Information

RTECS: Repeated dose toxicity - rat - male - No observed adverse effect level - 87 mg/kg

RTECS: AF8796000

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	LC50 - <i>Cyprinus carpio</i> (Carp) - > 0,206 mg/l - 96 h LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - > 0,1 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - <i>Daphnia</i> - > 0,1 mg/l - 48 h
Toxicity to algae	EbC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - 0,00023 mg/l - 72 h

12.2 Persistence and degradability

Biodegradability

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

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12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.
no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 - 14.5 UN number and proper shipping name, Transport hazard class(es), Transport hazard class(es), Environmental hazards

ADR/RID

UN number:	UN3077	Class:	9	Packing group:	Packing Group III
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Chloro-5-(4-chloro-5-difluoromethoxy-1-methylpyrazol-3-yl)-4-fluorophenoxyacetic acid ethyl ester)				
Environmental hazards	yes				

IMDG

UN number:	UN3077	Class:	9	Packing group:	Packing Group III
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Chloro-5-(4-chloro-5-difluoromethoxy-1-methylpyrazol-3-yl)-4-fluorophenoxyacetic acid ethyl ester)				
Environmental hazards	IMDG Marine pollutant: yes				

IATA

UN number:	UN3077	Class:	9	Packing group:	Packing Group III
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (2-Chloro-5-(4-chloro-5-difluoromethoxy-1-methylpyrazol-3-yl)-4-fluorophenoxyacetic acid ethyl ester)				
Environmental hazards	yes				

14.6 Special precautions for user

No data available

14.7 Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

SECTION 15: Regulatory information

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

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

No data available

15.2 Chemical Safety Assessment

no data available

SECTION 16: Other information

Further information

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The above information is believed to be correct but shall not be taken as being 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. Chemodex Ltd. and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.chemodex.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.