

MATERIAL SAFETY DATA SHEET

1. Identification of the product and company

Name: QUICKDOWN
Chemical Description
Active ingredients: Pyraflufen-ethyl
Use: Agriculture (Defoliant, Desiccant)
Company identification: Certis
1b Mills Way, Boscombe Down Business Park, Amesbury, Wiltshire.
SP4 7RX Telephone: +44 (0)1980 676500 Fax: +44 (0)1980 626555
Anti-poison centre tel: For advice on medical emergencies, fires, spillages or chemical hazards ONLY – phone +44 (0)870 190 6777.
For further advice for medical professionals - The National Poisons Information Service: Tel: +44 (0)870 600 6266 (UK only) or Dublin Tel: 00353 1379 964/379966.
For further advice for veterinary surgeons: +44 (0)20 7635 9195

2. Hazards identification

Classification: Xn (Harmful), N (Dangerous for the environment)
Physical and chemical hazards: Combustible liquid
Adverse human health effects: R20 Harmful if inhaled.
R38 Irritating to skin
R41 Risks of serious damage to eyes.
R43 May cause sensitization by skin contact
Environmental effect: R50 Very toxic to aquatic organisms

3. Information on ingredients

Substance / Mixture: Mixture
Ingredients and composition
Active ingredient: Ethyl 2-chloro-5-(4-chloro-5-difluoromethoxy-1-methylpyrazol-3-yl)-4-fluorophenoxyacetate (Common name: Pyraflufen-ethyl)

Hazardous components Chemical name	CAS No.	Symbol	R-phrase(s)	Concentration (%)
Pyraflufen-ethyl	129630-19-9	N*	R50/53*	2.5
Polyoxyethylene styrylphenyl ether formalin condensate	157291-93-5	Xi	R36/38	>=1-<5
Polyoxyethylene styrylphenyl ether	99734-09-5	Xi	R36/38	>=1-<5
Alkyl aryl sulfonate	70528-83-5	Xi	R36/38	>=1-<5
Xylene (mixed)	1330-20-7	–	R10-20/21-38	>=1-<5
Butyrolactone	96-48-0	Xn	R22-36	>5-<15
Dimethyl succinate	106-65-0	Xi	R36	>=1.5-<=2.5
Petroleum derived complex substance	64742-94-5	Xn, N	R51/53, R65-66	>60-<70

4. First aid measures

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Immediately get medical attention.
Skin contact: Remove contaminated clothing. Wash with plenty of water and soap. Immediately get medical attention.
Ingestion: If swallowed, rinse mouth with water, and give one or two glasses of water to drink. Keep patient at rest and obtain medical aid. Do not induce vomiting.
Inhalation: Remove patient from exposure. Contact medical personnel.

5. Fire-fighting measures

Suitable extinguishing media: Water spray, Foam, Dry chemical powder, Carbon dioxide

Specific hazards during fire fighting: Combustion or thermal decomposition may evolve toxic vapours. (HCl, HF, CO, NO_x etc.)

Special protective equipment for fire-fighters: Firefighters should wear proper protective equipment.

Further information: Prevent extinguishing media such as water, foam, and dry chemicals to flow into ponds, rivers and lakes.

6. Accidental release measures

Personal precautions: Wear proper protective equipment.

Environmental precaution: Evacuate non-essential personnel. Prevent spills from entering sewers, watercourse or low areas. Washings should not be poured into drains or waterway.

Methods for cleaning up: Adsorb spillage onto sand, soil or any suitable adsorbent material. Transfer to a container for disposal. Wash the spillage area with water.

7. Handling and storage

Handling: Use with adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapour. After handling wash face and hands thoroughly with soap and water.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Storage

Requirements for storage areas and containers: Avoid direct sunlight. Store in a cool, dry and well-ventilated place. Keep in original containers, tightly closed.

Advice on common storage: Keep away from food, drink and animal feeding stuffs and out of reach of children. Keep locked up.

8. Exposure controls/personal protection

Exposure limits values : Pyraflufen-ethyl : Not established.

Exposure control

Engineering controls: If practical, use with adequate ventilation in the working area. Make available in the work area emergency shower and eyewash.

Personal protective equipment

Respiratory protection: Wear approved respiratory protection equipment.

Eye protection: Wear eyeglasses or chemical safety goggles.

Skin protection: Wear suitable protective clothing and gloves to prevent skin contact.

9. Physical and chemical properties

Appearance: pale yellow to brown liquid

Density: 1.03/20°C

pH: 4.9/20°C (1% water suspension)

Flash point: 89°C

Auto ignition: 450°C

10. Stability and reactivity

Chemical stability: This product considered to be stable under normal warehouse condition.

Incompatibility with other materials: Not known

Hazardous decomposition products: Combustion or thermal decomposition will evolve toxic vapours (HCl, HF, CO, NO_x etc.).

Hazardous polymerization: Not known

11. Toxicological information

Acute toxicity

Oral: Rat LD50(mg/kg) female >2,000
Dermal: No data available
Inhalation: Rat LC50(mg/L/4hr) male, female 2.1~5.4
Eye contact: Bovine corneal opacity and permeability test Very severe irritant
Skin contact: Rabbit Severe irritant
Sensitization: Mouse LLNA-test Positive

12. Ecological information

Persistence and degradability (Pyraflufen-ethyl):

Hydrolysis half life 13.1days/pH7

Photolysis half life 61.5h in distilled water (25°C, 85.8W/m², 280~800nm)

Aquatic organism toxicity

Rainbow trout LC50(96h) >10mg/L

Daphnia EC50(48h) 3.0mg/L

Green alga (*Selenastrum capricornutum*) EbC50(0-96h) 32µg/L

ErC50(24-96h) 70µg/L

13. Disposal consideration

Product: Product should be disposed of according to label instruction and / or local regulation.
Do not dump into sewers, on the ground or into any body of water. Repealing liquid containing pyraflufen-ethyl should be avoided to flow into river, pond and lake.

Contaminated packaging: Dispose of used container according to the local regulation.

14. Transport information

ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pyraflufen-ethyl)
UN Number 3082, Class 9

Hazard code 90

Packaging group III

RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pyraflufen-ethyl)

UN Number 3082, Class 9

Hazard code 90

Packaging group III

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pyraflufen-ethyl)

UN Number 3082, Class 9

Hazard code 90

Packaging group III

MARINE POLLUTANT*

ICAO/IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pyraflufen-ethyl)

UN Number 3082, Class 9

Hazard code 90

Packaging group III

15. Regulatory information

This product is classified as follows and labelled accordingly.

Symbol: Xn (harmful), N (dangerous for environment)

Risk phrase: R20-38-41-43-50

Safety phrase: S2-13-23-24/25-26-37/39-56

Please refer to any other EU, national and local measures.

16. Other information

Text of Risk-phrases and Safety-phrases mentioned in Section 2, 3 and 15

R10: Flammable

R20: Harmful by inhalation

R22: Harmful if swallowed

R20/21: Harmful by inhalation and in contact with skin

R36: Irritating to eyes

R38: Irritating to skin

R36/38: Irritating to eyes and skin.
R41: Risks of serious damage to eye.
R43: May cause sensitization by skin contact.
R50: Very toxic to aquatic organisms.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65: Harmful: may cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.
S2: Keep out of reach of children.
S13: Keep away from food, drink and animal feeding stuffs.
S23: Do not breathe the gas/fumes/vapour/spray (appropriate wording to be specified by the manufacture)
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39: Wear suitable gloves and eye/face protection.
S56: Dispose of this material and its container to hazardous or special waste collection point.

DISCLAIMER OF LIABILITY. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.