

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

1.1. Product identifier

Product form	: Mixture
Product name	: CRESCENT
Product code	: AD 149 C1160
Type of formulation	: Emulsifiable concentrate (EC)
Active Ingredient	: Fluroxypyr-meptyl

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

1.2.1. Relevant identified uses

Main use category	: Plant protection product for professional use; agriculture
Use of the substance/mixture	: Herbicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

CERTIS UK
Suite 5, 3 Riverside
Granta park
Cambridgeshire CB21 6AD
United Kingdom
Tel: +44 (0)845 3730305
Fax: +44 (0) 1223 891210
Email: Certis@certiseurope.co.uk
Website : www.certiseurope.co.uk

1.4. Emergency telephone number

Emergency number : Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777.
For advice on medical emergencies, fires, spillages or chemical hazards only –phone: 0870 190 6777.
For further advice for medical professionals - The National Poisons Information Service:
Tel: 0870 600 6266 (UK only) or Dublin Tel: 0035 3 137 99 64/379966.
For further advice for veterinary surgeons: 020 7635 9195.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3	H226
Eye Dam. 1	H318
STOT SE 3	H336
Asp. Tox. 1	H304
Skin Irrit. 2	H315
Skin Sens. 1B	H317
Aquatic Chronic 1	H410

Full text of H-phrases: see section 16.

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes serious eye damage. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.
Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazardous ingredients

: Fluroxypyr-mepthyl, Organic sulphonate surfactants 1&2, Aromatic Hydrocarbon Solvent

Hazard statements (CLP)

 : H226 - Flammable liquid and vapour.
 H304 - May be fatal if swallowed and enters airways.
 H315 - Causes skin irritation
 H318 - Causes serious eye damage.
 H317 - May cause an allergic skin reaction.
 H336 - May cause drowsiness or dizziness.
 H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

 : P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
 P303 Do NOT induce vomiting
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 – IF IN EYES: Immediately call a POISON CENTRE or doctor.
 P311 – IF INHALED: Call a POISON CENTRE or doctor.
 P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P350 - IF ON SKIN: Wash with plenty of soap and water.
 P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

EUH phrases

: EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients
3.1. Substances

Not applicable.

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aromatic Hydrocarbon Solvent	(CAS No) 81406-37-3 (EC index no) 279-752-9	60-70	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Fluroxypyr-meptyl	(CAS No) 81406-37-3 (EC index no) 279-752-9 (REACH-no) 01-211946358334	25 – 50	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Organic sulphonate surfactants 1&2	Mixture	5 - 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 Aquatic Chronic 2, H411

Full text of H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : In the event of any complaints or symptoms, avoid further exposure.
- First-aid measures after inhalation : IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist call a doctor.
- First-aid measures after skin contact : IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do not induce vomiting. Never give anything by mouth to an unconscious person.

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

- Symptoms/injuries : Signs and symptoms of excessive exposure may be central nervous system effects such as headache, dizziness or anaesthesia.
- May cause lung damage or even death due to chemical pneumonia.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray
Dry chemical powder
Alcohol resistant foam
Carbon dioxide (CO₂).
- Unsuitable extinguishing media : Jet of water.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : The product is flammable.
Combustion or thermal decomposition may generate toxic vapours: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire.
Fight fire from safe distance and protected location.
Do not breathe fumes.
Cool closed containers exposed to fire with water spray.
If possible, take the containers out of dangerous zone.
Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers or streams.
- Protection during firefighting : Wear suitable protective clothing, gloves, eye/face protection and respiratory protection
Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Protective equipment : Wear suitable protective clothing, gloves and eye or face protection.
- Emergency procedures : Evacuate area.
- Ensure adequate ventilation.
- Avoid direct contact with the substance.
- Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.2. Environmental precautions

- Prevent entry to sewers and public waters.
- Notify the authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.
- Once absorbed collect spilled material with shovels, buckets and place in closed containers and label properly.
- Remove as chemical waste, according to national or local legislation.
- In the event of major spillage: contact an expert.

6.4. Reference to other sections

See sections 7-8-13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Read label before use.
- Use only outdoors or in a well-ventilated area.
- Avoid contact with eyes, skin, nose and mouth.
- Avoid breathing dust, mist or spray.
- Wear suitable protective clothing, gloves and eye/face protection.
- Keep away from heat/sparks/open flames/hot surfaces.
- Use explosion-proof equipment.
- Use only non-sparking tools.
- Take precautionary measures against electrostatic discharges.
- Opened containers must be carefully closed and kept upright to avoid leakage.
- Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace.
- Contaminated work clothing should not be allowed out of the workplace.
- Do not eat, drink or smoke when using this product.
- Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Prevent unauthorised access.
- Keep locked up and out of the reach of children.
- Keep in original containers, tightly closed.
- Keep away from food, drink and animal feedingstuffs.
- Protect against frost.
- Keep away from heat and direct sunlight.
- Take precautionary measures against electrostatic discharges.
- Keep away from heat/sparks/open flames/hot surfaces. Keep away from heat and direct sunlight.

7.3. Specific end use(s)

Herbicide for agricultural use. Refer to the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data is available for the active ingredient; however for the solvent the value is 200mg/m³.

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Protective clothing. Protective goggles. Gloves. Aerosol mask.



Hand protection : Wear impervious gloves chemical resistant nitrile rubber.

Eye protection : Safety goggles or a face shield.

Skin and body protection : Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots.

Respiratory protection : Wear appropriate respirator for dust / organic vapors.

Hygiene measures : Do not eat, drink or smoke while handling the product.

Clean gloves with soap and water before removing.

Wash hands and face with soap and water before eating, drinking or smoking.

Clean equipment, premises and work clothes regularly.

Work clothing should remain on the work area and stored separately from street clothes.

Environmental exposure controls : Discharge into the environment must be avoided.

Do not contaminate surface and groundwater.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties: CRESCENT

Physical state	: Liquid
Colour	: Yellow
Odour	: Characteristic
Odour threshold	: No data available
pH	: 5.3 (1% aq. solution)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 56 °C
Self ignition temperature	: >405 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: inflammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.978 g/cm ³ (20 °C)
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 3.7 mm ² /sec (20 °C)
Explosive properties	: None

Oxidising properties : Not oxidising
 Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

Is not explosive and does not exhibit oxidant properties.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. Keep away from heat and direct sunlight. Protect from frost.

10.5. Incompatible materials

Strong acidic, basic or oxidizing materials.

10.6. Hazardous decomposition products

Combustion or thermal decomposition may generate toxic vapours: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Fluroxypyr-meptyl

LD50 oral rat	> 2000 mg/kg
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Acute toxicity : May be fatal if swallowed and enters airways.
 Skin irritation : Causes skin irritation.
 Skin sensitisation : May cause an allergic skin reaction.
 Eye damage : Causes serious eye damage.
 Inhalation : May cause drowsiness or dizziness.
 Carcinogenicity : Not classified
 Mutagenicity : Not classified
 Toxicity for reproduction : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Fluroxypyr-meptyl

LC50 Fish (<i>Oncorhynchus mykiss</i>)	>0.2 mg/l
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EC50 Daphnia	>0.2 mg/l
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LC50 Algae (<i>Scenedesmus subspicatus</i>)	>0.5 mg/l
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Fluroxypyr acid /MHE (lowest value reported)

LD50 oral (mammal)	>2000 mg/kg bw
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LD50 contact (bees)	>100 µg/bee
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LD50 oral (bees)	37.1 µg/bee
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LD50 acute (earthworm)	>1000 mg/Kg
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12.2. Persistence and degradability

In soil DT₅₀: Fluroxypyr-meptyl, 0.5-1.8 days; fluroxypyr 2.7-39.6 days; fluroxypyr pyridinol, 4.1-105.4 days; Fluroxypyr methoxy pyridine 16.7-1160.9 days. Fluroxypyr-meptyl and fluroxypyr acid are not readily biodegradable.

12.3. Bioaccumulative potential

Fluroxypyr-meptyl (81406-37-3)	
Bioaccumulative potential	Bioconcentration potential low (BCF<100).

12.4. Mobility in soil

Fluroxypyr-meptyl is immobile in soil, fluroxypyr acid is highly to very highly mobile.

12.5. Results of PBT and vPvB assessment

No additional information available.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations
13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No. : 1993

14.2. UN proper shipping name

Transport document description : UN 1993 FLAMMABLE LIQUID, N.O.S. (Aromatic hydrocarbon), pollutant

14.3. Transport hazard class(es)

Class (UN) : 3

14.4. Packing group

Packing group (UN) : III

14.5. Environmental hazards

Dangerous for the environment :

Marine pollutant



Other information : No supplementary information available.

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance.

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage, Category 1
Skin Irrit. 2	Skin irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
Skin sens. 1B	Skin sensitisation, Category 1B
H226	Flammable liquid and vapour
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness
H317	May cause an allergic skin reaction
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.