



Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006

MINSTREL

Preparation Date 03-Apr-2012

Revision date 23-Sep-2019

Revision Number: 5

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the product

Product code	HBL02
Product Description	MINSTREL
Formulation	Fluroxypyr 200 g/L EC
Synonyms	-
Pure substance/preparation	Preparation

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use	Herbicide
Sector(s) of use	SU1 - Agriculture, forestry, fishery
Product category	PC27 - Plant protection products

1.3 Details of the Supplier of the Safety Data Sheet

Supplier	UPL Europe Ltd Engine Rooms Birchwood Park Warrington WA3 6YN Cheshire UK Tel. : +44 (0) 1925 819999 Fax : +44 (0) 1925 856075
E-mail address	sds.info@upl-ltd.com

1.4 Emergency Telephone Number

Emergency Telephone	(CARECHEM 24): +44 (0) 1235 239670
United Kingdom	NHS no. 111

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Aspiration toxicity	Category 1 - (H304)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H335)/(H336)
Acute aquatic toxicity	Category 1 - (H400)
Chronic Aquatic Toxicity	Category 1 - (H410)
FLAMMABLE LIQUIDS	Category 3 - (H226)

Additional information

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

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



signal word

DANGER

Hazard Statements

H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention
P391 - Collect spillage
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose of contents/ container in accordance with national regulation

EU Specific Hazard Statements

EUH066 - Repeated exposure may cause skin dryness or cracking
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

2.3 Other Hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

Chemical name	CAS No	EC No	Index-No.	REACH No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Fluroxypyr 1-methylheptyl ester	81406-37-3	279-752-9	607-272-00-5	-	30 - 40	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Hydrocarbons, C9, aromatics	64742-95-6	918-668-5	-	01-2119455851-3 5-XXXX	60 - 70	Flammable liquids 3 (H226) STOT SE 3 (H335) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411) (EUH066)
Mixture of Alkyl Aryl Sulfonic Acide and its Calcium Sodium and Potassium salt	-	-	-	-	5 - 10	STOT SE 3 (H335) STOT SE 3 (H336) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411) Flammable liquids 3 (H226)

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

Section 4: FIRST AID MEASURES**4.1 Description of first-aid measures****General advice**

- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

Inhalation

- Move to fresh air
- If symptoms persist, call a physician
- Effects of overexposure: • Causes headache, drowsiness or other effects to the central nervous system
- May cause irritation of respiratory tract

Eye contact

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists, consult a specialist

Skin contact

- Wash off immediately with plenty of water
- If symptoms persist, call a physician

Ingestion

- Rinse mouth with water
- Do NOT induce vomiting
- Call a physician or poison control center immediately

Self-protection of the first aider

- First aider: Pay attention to self-protection

4.2 Most Important Symptoms and Effects, Both Acute and Delayed**Symptoms**

- If inhaled: Effects of overexposure, Causes headache, drowsiness or other effects to the central nervous system
- Aspiration hazard if swallowed - can enter lungs and cause damage

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**Note to physicians**

- Treat symptomatically

Section 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

- Water spray, fog or alcohol-resistant foam
- Carbon dioxide (CO₂)
- Foam
- Dry powder

Unsuitable extinguishing media

- Do not use a solid water stream as it may scatter and spread fire

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

- Burning produces obnoxious and toxic fumes

5.3 Advice for Firefighters

- Wear self-contained breathing apparatus and protective suit

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Personal Precautions

- Avoid contact with skin and eyes
- Wear protective gloves/protective clothing and eye/face protection

Emergency procedures

- Evacuate personnel to safe areas

Emergency responder

- Use personal protective equipment as required
- Evacuate personnel to safe areas

6.2 Environmental Precautions

- Prevent further leakage or spillage if safe to do so
- Do not allow material to contaminate ground water system
- Do not flush into surface water or sanitary sewer system

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

- Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container

Prevention of secondary hazards

- Clean contaminated objects and areas thoroughly observing environmental regulations

6.4 Reference to other sections

- No information available

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling**Advice on safe handling**

- Provide adequate ventilation
- Use only outdoors or in a well-ventilated area
- Ensure that eyewash stations and safety showers are close to the workstation location

General hygiene considerations

- Do not eat, drink or smoke when using this product
- Keep away from food, drink and animal feeding stuffs
- Avoid contact with skin and eyes
- Wash hands before breaks and immediately after handling the product
- Remove contaminated clothing and protective equipment before entering eating areas

7.2 Conditions for safe storage, including any incompatibilities

- Keep only in the original container/package in a cool well-ventilated place
- Keep in a dry place
- Avoid extreme high or low temperatures.
- Keep away from heat and sources of ignition

7.3 Specific end uses

- Herbicide
- Please refer to the product labeling and packaging for information about appropriate use

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters**Exposure Limits**

- Contains no substances with occupational exposure limit values

8.2 Exposure Controls**Engineering controls**

- Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment*Eye/face protection*

- Safety glasses with side-shields
- Eye protection must conform to standard EN 166

Hand protection

- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed.

Wash hands frequently and always before eating, drinking, smoking or using the toilet.

- Gloves must conform to standard EN 374

- Wear protective nitrile rubber gloves
- Rate of permeability : > 480 min
- Glove thickness : > 0,4 mm

Skin and body protection

- Wear standard coveralls and Category 3 Type 4 suit.

If there is a risk of significant exposure, consider a higher protective type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

Respiratory protection

- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Recommended filter type: brown P2

General hygiene considerations

- Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

- Local authorities should be advised if significant spillages cannot be contained
- Do not allow into any sewer, on the ground or into any body of water
- Prevent product from entering drains

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	White to light yellow	
Physical state	Liquid	
Odor	Emulsifiable concentrate (EC) characteristic, paint like	
<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>
pH	5.5	(1% solution) CIPAC MT 75.3
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	48 °C	EC A.9
Flammability (solid, gas)	Not applied	
Surface tension	29.7 mN/m	(25°C), OECD 115, EC A.5
Relative Density	0,975 g/mL	EC A.3
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	>434 °C	EC A.15
Decomposition temperature	No information available	
Viscosity	3.11 mm ² /s	Viscosity, kinematic, 20 °C, OECD 114
Oxidizing properties	Not expected	EC A.21
Explosive properties	According to the chemical structure no explosion reaction is expected	EC A.14

9.2 OTHER INFORMATION

VOC Content No information available

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

- No information available

10.2 Chemical stability

- Stable under normal conditions

10.3 Possibility of hazardous reactions

- None under normal processing

10.4 Conditions to avoid

- Extremes of temperature and direct sunlight
- Keep away from heat, sparks and open flame. - No smoking

10.5 Incompatible Materials

- Acids
- Strong bases
- Oxidizing agent

10.6 Hazardous Decomposition Products

- No information available

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute toxicity

LD50 Oral > 5000 mg/kg (rat) - OECD 423
LD50 Dermal > 2000 mg/kg (rat) - OECD 402
LC50 Inhalation > 5.144 mg/l - OECD 403

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Fluroxypyr 1-methylheptyl ester	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 1.0 mg/air/4h (rat)
Hydrocarbons, C9, aromatics		> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h = 3400 ppm (Rat) 4 h

Skin corrosion/irritation

- Mild skin irritation
- OECD 404

Serious eye damage/eye irritation

- Irritating to eyes
- OECD 405

Respiratory or skin sensitization

- Did not cause sensitization
- OECD 406

Germ cell mutagenicity

- No information available

Carcinogenicity

- No information available

Chemical name	EU Annex I Carcinogen Information
Hydrocarbons, C9, aromatics	1B

Reproductive toxicity

- No information available

Specific target organ toxicity (single exposure)

- No information available

Specific target organ toxicity (repeated exposure)

- No information available

Aspiration hazard

- No information available

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Product information

EC50/72h/algae = >100 mg/L - OECD 201
 EC50/48h/daphnia = 5.81 mg/L - OECD 202
 LC50/fish/96 h = 3.2 mg/L - OECD 203

Component Information

Chemical name	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Fluroxypyr 1-methylheptyl ester	Algae EC50 = 0.208 mg/l (Skeletonema costatum)	Acute fish LC50 > 0.225 mg/l (Oncorhynchus mykiss)	-	Acute daphnia EC50 = > 0.183 mg/l (Daphnia magna)
Hydrocarbons, C9, aromatics	-	LC50 96 h: = 9.22 mg/L (Oncorhynchus mykiss)	-	EC50 48 h: = 6.14 mg/L (Daphnia magna)

12.2 Persistence and Degradability

- No information available

12.3 Bioaccumulative Potential

Chemical name	Log Pow
Fluroxypyr 1-methylheptyl ester	4.53

12.4 Mobility in Soil

- No information available

12.5 Results of PBT and vPvB Assessment

- No information available

12.6 Other Adverse Effects

- No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste from residues/unused products

- Dispose of in accordance with local regulations

Contaminated packaging

- Empty containers should be taken for local recycling, recovery or waste disposal

EWC waste disposal No

- 020108 - agrochemical waste containing dangerous substances

OTHER INFORMATION

- According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

Section 14: TRANSPORT INFORMATION

14.1 UN Number

- ADR, IMDG, IATA : UN1993

14.2 UN proper shipping name

- ADR : Flammable liquid, n.o.s (Hydrocarbons, C9, aromatics)
- IMDG : Flammable liquid , n.o.s. (Hydrocarbons, C9, aromatics)
- IATA : Flammable liquid , n.o.s. (Hydrocarbons, C9, aromatics)

14.3 Transport Hazard Class(es)

Hazard class

- ADR, IMDG, IATA : 3

Subsidiary class

- ADR, IMDG, IATA : Not applicable

14.4 Packing Group

- ADR, IMDG, IATA : III

14.5 Environmental Hazards

- ADR, IATA : DANGEROUS FOR THE ENVIRONMENT
- IMDG : IMDG - Marine Pollutant

14.6 Special Precautions for User

Special Provisions

- ADR : 274, 601, 640E
- IMDG : 223, 274, 955
- IATA : A3

ADR - Tunnel restriction code
(D/E)

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC CODE

- Not applicable

Section 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Registration n° MAPP 13745

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

15.2 Chemical safety assessment

- A chemical safety assessment has not been carried out

Section 16: OTHER INFORMATION**Full text of H-Statements referred to under sections 2 and 3**

- H226 - Flammable liquid and vapor
- H304 - May be fatal if swallowed and enters airways
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H319 - Causes serious eye irritation
- H335 - May cause respiratory irritation
- H336 - May cause drowsiness or dizziness
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H411 - Toxic to aquatic life with long lasting effects
- EUH066 - Repeated exposure may cause skin dryness or cracking

Classification procedure

- On basis of test data

Abbreviations and acronyms

- CLP : Classification, Labelling and Packaging = Regulation (EC) No 1272/2008
- CAS : Chemical Abstracts Service
- EC No : EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- LDx : Lethal dose to x %
- LCx : Lethal concentration to x %
- ECx : Effective concentration to x %
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
- Very Persistent and very Bioaccumulative (vPvB) Chemicals
- EWC : European Waste Catalogue
- ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
- IMDG : International Maritime Dangerous Goods Code
- IATA : International Air Transport Association

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Reason for revision **New formatting**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 + Commission Regulation (EU) No 2015/830 of 28 May 2015

Disclaimer

The information contained is based on our knowledge of the product at the date of publishing.

It applies to the PRODUCT AS SUCH. In case of formulation or mixture, make sure that a new danger will not appear.

Users are advised of possible additional hazards when the product is used in applications for which it was not intended.

This sheet shall only be used and duplicated for prevention and Safety purposes.

For rates and use recommendations, refer to the information displayed on the packaging.

It is the responsibility of the handlers of the product to pass on this safety data sheet to any subsequent persons who will come into contact with the product.

End of Safety Data Sheet