

1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY**1.1 Product identifier****Trade name and/or other names and company product codes by which the mixture can be identified**

Tensira

Unique Formula Identifier (UFI)

4975-P25U-UD2X-R0XN

1.2 Relevant identified uses of the mixture and uses advised against**1.2.1 Relevant identified uses**

Agricultural herbicide for professional use only.

1.2.2 Uses advised against

Do not use for any other purpose.

1.3 Details of the supplier of the safety data sheetAlbaugh Europe Sàrl
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Avenue Gratta-Paille 2
1018 Lausanne
SwitzerlandTelephone: +41 21 799 9130
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Email: sds@albaugh.eu
Web: www.albaugh.eu**1.4 Emergency telephone number**For advice on medical emergencies, fires or major spills: +44 (0) 1235 239 670Available: 24 h
Time Zone: GMT
Language(s) of phone service: All EU languagesUK National Poisons Information Service: +44 (0) 121 507 4123 (for health professionals only)Available: 24h
Time Zone: GMT
Language(s) of phone service: English**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) no. 1272/2008 [CLP/GHS]**

Signal word	Hazard class and category	Pictograms	Hazard statement
Warning	Flam. Liq. 3	GHS02	H226 Flammable liquid and vapour
Danger	Eye Irrit. 2	GHS05	H319 Causes serious eye irritation
Warning	STOT SE 3	GHS07	H335 May cause respiratory irritation H336 May cause drowsiness or dizziness
Danger	Asp. Tox. 1	GHS08	H304 May be fatal if swallowed and enters airways

Signal word	Hazard class and category	Pictograms	Hazard statement
Warning	Aquatic Acute 1	GHS09	H400 Very toxic to aquatic life
	Aquatic Chronic 1		H410 Very toxic to aquatic life with long lasting effects

Additional information

For abbreviations, refer to Section 16.

2.2 Label elements

Labelling according to Regulation (EC) no. 1272/2008

Hazard pictograms



GHS02



GHS07



GHS08



GHS09

Signal Word

Danger

Hazard Statements

H226: Flammable liquid and vapour

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

General -

Prevention P261: Avoid breathing fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves / protective clothing / eye protection / face protection.

Response P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P304+P340: IF INHALED: Remove person to fresh air and keep 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.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P331: Do NOT induce vomiting.

P337+P313: If eye irritation persists: Get medical advice/attention.

P391: Collect spillage.

Storage P405: Store locked up.

Disposal P501: Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

Supplemental information:

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

SP 1: Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

SPe 3: To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

2.3 Other hazards

This mixture does not meet the PBT criteria of REACH Regulation, Annex XIII.

This mixture does not meet the vPvB criteria of REACH Regulation, Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Description of the mixture:

Mixture of Fluroxypyr and co-formulants.

Chemical Name	CAS-No.	EC-No.	Index No.	Concentration (w/w)	CLP (Reg. 1272/2008) Classification	SCL/M-Factor/ATE
Hydrocarbons, C9, aromatics	64742-95-6	918-668-5	-	50 - 70 %	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	-
Fluroxypyr-meptyl Methylheptyl, O-(4-amino-3,5-dichloro-6-fluoro-2-pyridyloxy) acetate	81406-37-3	279-752-9	607-272-00-5	20,4 %	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	-
Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salt	68953-96-8	273-234-6	-	<5 %	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	-
1-Butanol	71-36-3	200-751-6	603-044-006	<5 %	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-
Other ingredients				to 100 %	Not classified	

Additional information

For full text of H-phrases, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General notes:

If symptoms occur after exposure to this product, seek medical attention immediately and show the product label or this SDS. Remove to fresh air and keep at rest. Do not allow smoking or eating. Take off all contaminated clothing and footwear.

Following inhalation:

Remove to fresh air and keep at rest in half-upright position. Seek medical attention immediately.

Following skin contact:

Remove all contaminated clothing. Wash skin with soap and rinse with plenty of water. Seek medical attention if irritation arises. Wash clothes before re-use.

Following eye contact:

Immediately rinse with water. Holding eyes open, continue rinsing for 15 minutes at least. Remove contact lenses as soon as possible. Seek medical attention immediately. The workplace must be equipped with an emergency eyewash.

Following ingestion:

If swallowed, DO NOT INDUCE VOMITING: seek medical advice immediately and show this container or label. Remove any residues from mouth and rinse it with plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of first aider

Personal protective equipment for first aid responders is recommended according to potential for exposure (refer to Section 8).

4.2 Most important symptoms and effects, both acute and delayed

The symptoms and the effects indicated in this section refer to an accidental exposure scenario.

Following inhalation:

Cough. Throat pain. Drowsiness, dizziness, disorientation, vertigo. Respiratory tract irritation. May be fatal if swallowed and enters airways.

Following skin contact:

Possible slight transitory redness. No delayed effects expected.

Following eye contact:

Irritation and redness. No delayed effects expected.

Following ingestion:

Can cause throat and stomach pain or vomiting. Drowsiness, dizziness, disorientation, vertigo. May be fatal if swallowed and enters airways. Delayed effects may be expected.

4.3 Indication of immediate medical attention and special treatment needed

No need to provide any special means/medicinal products for immediate treatment at the workplace. Provide eyewash facilities when possible.

Notes for the doctor:

No specific antidote. Treat symptomatically (decontamination, vital functions). Call a Poison Centre immediately for treatment advice. In case of ingestion gastric lavage may be necessary (with proper laryngeal control). Before emptying the stomach, assess the potential danger arising from lung aspiration against the product toxicity. Report to Albaugh Europe Sàrl any unusual symptoms occurring after exposure by any route.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

Carbon dioxide, water spray, alcohol-resistant foam, dry chemical for small fires, alcohol-resistant foam or water spray for large fires.

Unsuitable extinguishing media:

Solid water jet.

5.2 Special hazards arising from the mixture

Hazardous combustion products

Evolves obnoxious and toxic fumes.

5.3 Advice for fire-fighters

Clothing conforming to EN469 should be sufficient to deal with fires involving the mixture.

However, a Self-Contained Breathing Apparatus (SCBA) is required if there is a potential for exposure to combustion fumes.

Additional information

Provide storage and work areas with suitable fire extinguishers.

Call the Fire Brigade at once to deal with all fires involving pesticides unless the fire is small and immediately controllable. Spray unopened containers with a mist spray to keep cool. If without risk, remove intact containers from exposure to fire. Contain fire-fighting water, bunding if necessary, with sand or earth. Do not allow contamination of public drains or surface or ground waters. Dispose of fire debris and contaminated water as advised in the MAFF/HSE "Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings".

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Precautions: Do not inhale the mixture.

Protective equipment: Wear prescribed personal protective equipment to prevent inhalation and contact with eyes and skin. A Self-Contained Breathing Apparatus (SCBA) may be required if there is an elevated risk for exposure.

Emergency procedures: Remove immediately any contaminated clothing. Call the emergency services if the release is not immediately controllable. If the release is localised and immediately controllable, wear a Self-Contained Breathing Apparatus (SCBA) and try and control the release at its source.

6.1.2 For emergency responders

Clothing conforming to EN469.

6.2 Environmental precautions

The product is very toxic to aquatic life with long lasting effects. Use appropriate containment to avoid environmental contamination. Control the release at its source. Contain the spill to prevent it from spreading, contaminating soil or entering sewage and drainage systems or any body of water. Inform the local water company if the release enters drains and the Environment Agency (England and Wales), the Scottish Environmental Protection Agency (Scotland) or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters.

6.3 Methods and material for containment and cleaning up

For containment

Wear prescribed personal protective equipment to prevent inhalation and contact with eyes and skin. A Self-Contained Breathing Apparatus (SCBA) may be required if there is an elevated risk for exposure. Clean up spills immediately and place in a compatible disposal container. Contain spill by diking with earth, sand or absorbent material and place into a compatible marked disposal container.

For cleaning up

The mixture is a liquid emulsion concentrate. Scrub area with a hard water detergent. Soak up wash liquid with additional absorbent material and place into a compatible marked disposal container. Seal container and arrange for disposal.

Other information

Not Applicable

6.4 Reference to other sections

Refer to Section 8 for personal protective equipment and to Section 13 for disposal instructions.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide suitable ventilation in the areas where the product is stored and used. Contaminated work clothing should not be allowed out of the workplace. Avoid all contact by mouth, with eyes and skin. Wear personal protective equipment as specified in Section 8. When using, do not eat, drink or smoke. Remove contaminated clothing and protective equipment before meals and after work. Wash hands and exposed skin before meals and after work. Wash all protective clothing thoroughly after use, especially the insides of gloves.

7.2 Conditions for safe storage, including any incompatibilities

The mixture is stable under normal ambient conditions. Keep in original container, in a dry, cool and safe place. Store in a locked, suitable store. Keep away from any source of ignition. Keep out of the reach of children and unauthorised personnel. Keep away from food, drink and animal feeding stuffs.

7.3 Specific end use(s)

Product for professional use as directed by the product label, every other use is hazardous.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control Parameters

Occupational Exposure limit values

Occupational Exposure limit values have been set for the following components.

Component CAS-No.	Occupational Exposure Levels				Comments	Reference
	8h - TWA		Short term			
	mg/m ³	ppm	mg/m ³	ppm		
1-Butanol 71-36-3	-	-	154	50	Can be absorbed through the skin.	UK - EH40

Information on monitoring procedures

None available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Engineering controls and appropriate work processes must be used to eliminate or reduce worker and environmental exposure in the areas where the product is handled, transported, loaded, unloaded, stored and used. These measures must be adequate for the extent of the actual risk. Provide adequate local exhaust ventilation. Use specialized transfer systems if available.

8.2.2 Personal protection equipment

Eye and face protection:

Wear suitable eye protection (EN 166).

Skin protection:

Hand protection: Wear suitable protective gloves against chemicals (EN 374 part 1, 2, 3). Nitrile rubber min. 0.5mm thick and 300mm long gloves are the ones proven to be the most suitable according to tests on pesticide products.

Wash the gloves thoroughly after each use, especially the insides. Replace gloves if damaged and before exceeding the breakthrough time.

Body protection: Avoid contact with skin. If there is a significant potential for contact, wear suitable coveralls (ISO 13982-1, Type 5, EN 13034, Type 6).

Other skin protection: None specified.

Respiratory protection:

Wear suitable respiratory protection. If a risk assessment shows that engineering controls do not provide adequate respiratory protection to exposure, wear a Self-Contained Breathing Apparatus (SCBA).

Thermal hazards:

Not required under appropriate product use and storage.

8.2.3 Environmental exposure controls

Implement all applicable local and community environmental protection legislation. Refer to Section 15. Use appropriate containment to avoid environmental contamination. Do not empty into drains. Do not contaminate water with the product or used container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads. Refer to Section 12 and 13.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

All the data contained in this section are derived from similar mixtures unless otherwise stated.

- | | |
|--|--|
| a) <i>Physical state:</i> | Liquid |
| <i>Colour:</i> | From light yellow to amber |
| b) <i>Odour:</i> | Aromatic |
| c) <i>Odour threshold:</i> | Not determined. |
| d) <i>Melting point/freezing point:</i> | Not determined. The mixture is liquid at room temperature. |
| e) <i>Initial boiling point and boiling range:</i> | Not determined. Fluroxypyr-meptyl decomposes before boiling.
Lowest boiling point of co-formulants: 119°C (1-Butanol) |
| f) <i>Flammability (gas, liquid, solid):</i> | Flammable liquid and vapour. |

g) Upper/lower explosion limits:	No information available. Components bear no explosive properties.
h) Flash point:	48°C (CIPAC MT 12)
i) Auto-ignition temperature:	>434°C (EC A.15)
Minimum Ignition Temperature:	Not available.
Minimum Ignition Energy:	Not available.
j) Decomposition temperature:	Not applicable - No self-reactive mixture.
k) pH:	5.5 (CIPAC MT 75.3)
l) Kinematic viscosity	3.11 mm ² /s (OECD 114)
m) Solubility(ies)	No information available, fluroxyppy-meptyl = 136 µg/L,
Solubility (water):	lowest solubility of component: 93 mg/L (Hydrocarbons, C9, aromatics)
n) Partition coefficient: n-octanol/water:	No information available, fluroxyppy-meptyl = Log K _{ow} 5.04,
	highest coefficient of component: Log K _{ow} 4.595 (Benzenesulfonic acid)
o) Vapour pressure:	Active substance.: 1.0 x 10 ⁻⁵ Pa/m ³ (at 20°C),
	Lowest vapour pressure of component: 10 PA 20°C
	(Benzenesulfonic acid)
p) Density/relative density	0.975 g/ml
q) Relative vapour density	No information available.
r) Particle characteristics	Not applicable - the product is a liquid.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

None -

9.2.2 Other safety characteristics

None

10. STABILITY AND REACTIVITY

10.1 Reactivity

Non-reactive when stored in original container under normal conditions of storage and use.

10.2 Chemical stability

Stable when stored in original container under normal conditions of storage and use.

10.3 Possibility of hazardous reactions

No hazardous reactions when stored in original container under normal conditions of storage and use.

10.4 Conditions to avoid

Do not store in proximity of sources of ignition.

10.5 Incompatible materials

None

10.6 Hazardous decomposition products

During decomposition evolves obnoxious and toxic fumes.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.2 Mixtures

All the data contained in this section are derived from actual test data on a similar mixture unless otherwise stated.

a) Acute toxicity:

	Mixture	Relevant components	
		Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salt	1-Butanol
LD ₅₀ oral:	>5000 mg/kg bw (rat)	-	200 – 2000 mg/kg (rat)
LD ₅₀ dermal:	>2000 mg/kg bw (rat)	1000 – 1600 mg/kg (rat)	-
LC ₅₀ inhalation (4h):	5.144 mg/L (rat)	-	-

- b) Skin corrosion/irritation:** Not classified as a skin irritant under Regulation (EC) 1272/2008.

Relevant components	
Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salt	1-Butanol
Skin Irrit. 2, H315 Causes skin irritation	Skin Irrit. 2, H315 Causes skin irritation

- c) Serious eye damage/irritation:** Classified as Eye Irrit. 2, H319 Causes serious eye irritation under Regulation (EC) 1272/2008.

Relevant components	
Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salt	1-Butanol
Eye Dam. 1, H318 Causes serious eye damage	Eye Dam. 1, H318 Causes serious eye damage

- d) Respiratory or skin sensitization:** Did not cause skin sensitization in animal studies. May cause respiratory irritation.
- e) Germ cell mutagenicity:** Not classified as mutagenic on the basis of mixture component information.
- f) Carcinogenicity:** Not classified as carcinogenic on the basis of mixture component information.
- g) Reproductive toxicity:** Not classified as a reproductive toxicant on the basis of mixture component information.
- h) STOT – single exposure:** Classified as STOT SE 3, H335 May cause respiratory irritation, H336 May cause drowsiness or dizziness, based on the toxicity based of the mixture component information.

Relevant components	
Hydrocarbons, C9, aromatics	1-Butanol
STOT SE 3, H335 May cause respiratory irritation	STOT SE 3, H335 May cause respiratory irritation
STOT SE 3, H336 May cause drowsiness or dizziness	STOT SE 3, H336 May cause drowsiness or dizziness

- i) STOT – repeated exposure:** Not classified as hazardous for repeated dose toxicity on the basis of mixture component information.
- j) Aspiration hazard:** Classified as Aspiration Hazard H304 May be fatal if swallowed and enters airways, under Regulation (EC) 1272/2008.

Relevant components	
Hydrocarbons, C9, aromatics	
Asp. Tox. 1, H304 May be fatal if swallowed and enters airways	

Likely routes of exposure, symptoms related to the physical, chemical and toxicological characteristics, immediate and delayed effects as well as chronic effects from short- and long-term exposure and interactive effects:

Inhalation: There is a risk of exposure by inhalation.

Immediate acute and/or chronic effects from short- and/or long-term exposure:

Cough. Throat pain. Drowsiness, dizziness, disorientation, vertigo. Respiratory tract irritation. May be fatal if swallowed and enters airways.

Delayed acute and/or chronic effects from short- and/or long-term exposure:

May cause delayed effects after short- or long-term exposure.

Eye contact: There is a risk of exposure by eye contact.

Immediate acute and/or chronic effects from short- and/or long-term exposure:

Transitory irritation and redness. No irreversible or chronic effect expected.

Delayed acute and/or chronic effects from short- and/or long-term exposure:

No evidence of delayed effects after short- and long-term exposure.

Skin contact: There is a risk of exposure by skin contact.

Immediate acute and/or chronic effects from short- and/or long-term exposure:

Possible slight transitory redness.

Delayed acute and/or chronic effects from short- and/or long-term exposure:

No delayed effects expected.

Ingestion: There is a very low risk of accidental exposure by ingestion.

Immediate acute and/or chronic effects from short- and/or long-term exposure:

Can cause throat and stomach pain or vomiting.
Drowsiness, dizziness, disorientation, vertigo.
May be fatal if swallowed and enters airways.

Delayed acute and/or chronic effects from short- and/or long-term exposure:

Delayed effects may be expected including drowsiness, dizziness, disorientation, vertigo, vomiting.
May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties:

None

Other information:

None

12. ECOLOGICAL INFORMATION

All the information and data contained in this section are derived from data on the mixture or a similar mixture, unless indicated otherwise.

12.1 Toxicity

Acute Toxicity

Organism	Mixture	Relevant components	
		Fluroxypyr-meptyl	Hydrocarbons, C9, aromatics
Fish:	3.2 mg/L, LC ₅₀ (96h)	<i>Oncorhynchus mykiss</i> >0.225 mg/L, LC ₅₀ (96h)	<i>Oncorhynchus mykiss</i> 9.2 mg/L, LL ₅₀ (96h)
Crustacea:	<i>Daphnia magna</i> 5.81 mg/L, EC ₅₀ (48h)	<i>Daphnia magna</i> >0.183 mg/L, EC ₅₀ (48h)	<i>Daphnia magna</i> 6.14 mg/L, EC ₅₀ (48h)
Algae/Aquatic plants:	>100 mg/L, EC ₅₀ (72h)	<i>Skeletonema costatum</i> 0.208 mg/L, EC ₅₀ (120h)	<i>Pseudokirchneriella subcapitata</i> 2.9 mg/L, ErL ₅₀ (72h)
Birds:	-	>2000 mg/kg feed	>2250 mg/kg bw, acute oral LD ₅₀
Honey bees: (oral)	-	<i>Apis mellifera</i> >100 ug/bee, LD ₅₀	-
Honey bees: (contact)	-	<i>Apis mellifera</i> >100 ug/bee, LD ₅₀	-

Chronic Toxicity

Organism	Mixture	Relevant components	
		Fluroxypyr-meptyl	Hydrocarbons, C9, aromatics
Fish:	-	<i>Oncorhynchus mykiss</i> 0.2 mg/L, NOEC (21d)	<i>Oncorhynchus mykiss</i> 1.23 mg/L, NOELR (estimated) based on growth
Crustacea:	-	<i>Daphnia magna</i> 0.06 mg/L, NOEC (21d) based on reproduction	<i>Daphnia magna</i> 2.144 mg/L, NOELR (21d) based on reproduction
Algae/ Aquatic plants:	-	<i>Myriophyllum spicatum</i> 0.0536 mg/L, EC ₅₀ (14d)	<i>Pseudokirchneriella subcapitata</i> 0.07 mg/L, NOEC (72h)
Sediment dwellers:	-	<i>Chironomus riparius</i> 0.13 mg/L, NOEC (28d), dev	<i>Lumbriculus variegatus</i> 33.1 mg/kg sediment dw, LC ₅₀ (QSAR) (28d)
Birds:	-	-	<i>Colinus virginianus</i> >292 mg/kg bw, NOEL (14d)

12.2 Persistence and degradability: the mixture is non-persistent.

	Relevant components	
	Fluroxypyr-meptyl	Hydrocarbons, C9, aromatics
Abiotic degradation:	pH 5 stable; pH 9 DT50 = 3.2 days	Does not contain hydrolysable groups and have limited potential to hydrolyze
Physical- and photo-chemical elimination:	Expected to be stable	Substance has no potential to undergo photolysis in water and soil

	Relevant components	
	Fluroxypyr-meptyl	Hydrocarbons, C9, aromatics
Biodegradation:	Not readily biodegradable	Inherently to readily biodegradable in aerobic freshwater systems, biodegradation potential range of 56 to 78% following standard testing guidelines

12.3 Bioaccumulative potential: the mixture has a low bioaccumulative potential.

	Relevant components	
	Fluroxypyr-meptyl	Hydrocarbons, C9, aromatics
Partition coefficient n-octanol/water (log K_{ow}):	pH 5, log ₁₀ K _{ow} = 4.57 pH 7, log ₁₀ K _{ow} = 5.04 pH 9, log ₁₀ K _{ow} = 5.31 (20°C, 99.4% pure)	-
Bioconcentration factor (BCF):	-	>= 39.8 - <= 177.8 L/kg

12.4 Mobility in soil: the mixture has potential for limited mobility.

	Relevant components	
	Fluroxypyr-meptyl	Hydrocarbons, C9, aromatics
Known or predicted distribution to environmental compartments:	-	92.9% to air, 3.5% to water, 1.9% to sediment and 1.8% to soil
Surface tension:	-	The surface tension of Hydrocarbons, C9, aromatics, is 29.1 mN/m. This was based on neat material rather than in solution.
Adsorption/Desorption:	Soil batch adsorption / desorption experiments indicate that fluroxypyr-MHE may be classified as immobile in soil	-

12.5 Results of PBT and vPvB assessment

Does not fulfil the criteria for classification as PBT or vPvB.

12.6 Endocrine disrupting properties

None known

12.7 Other adverse effects:

None known

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal of waste product, contaminated packaging materials and any excess diluted spray should be in accordance with 'The Hazardous Waste (England and Wales) Regulations 2005' and any other applicable local or national legislation (for guidance refer to the MAFF/HSE "Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings").

For the handling and management of accidental release, follow the information given under Section 6 and 7.

14. TRANSPORT INFORMATION

14.1 UN number

UN1993

14.2 UN Proper shipping name

FLAMMABLE LIQUID, N.O.S.
(Hydrocarbons, C9, aromatics and 1-Butanol)

14.3 Transport hazard class(es)

3

14.4 Packing group

III

14.5 Environmental hazards

Land transport ADR/RID - Environmentally Hazardous: Yes
Maritime transport IMDG - Marine pollutant: Yes

14.6 Special Precautions for User

Land transport ADR/RID - Tunnel restriction code: D/E

14.7 Transport in bulk according to IMO instruments

IBC Code: IBC03

15. REGULATORY INFORMATION

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

EU Regulations

REGULATION (EC) No 1107/2009 of The European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC.

REGULATION (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

REGULATION (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

National Regulations/legislation:

The Chemicals (Hazard Information & Packaging for Supply) Regulations 2009 (CHIP 4).

Health and Safety at Work etc. Act 1974, as amended, the Control of Substances Hazardous to Health Regulations 1999 (COSHH), as amended.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment under Regulation (EC) 1907/2006 is required and has not been carried out.

16. OTHER INFORMATION

a) Indication of changes:

The numbering system identifying new versions and/or revisions of this SDS is incremental. An increment by an integer number identifies the issue of a new version requiring provision of updates according to Article 31(9) of REACH, while an increment by a decimal identifies minor changes such as typographical errors, text improvements and/or formatting.

Revisions indicated by a decimal point do not affect the risk management measures or information on hazards, do not refer to restrictions imposed and/or to authorisations granted or refused.

The paragraphs where changes have been made are indicated by the symbol '!' in the margin.

Differences between this version and the previous one: Update of Section 11 (Toxicological Information), Section 12 (Ecological Information). Section 14.6 (Special Precautions for User) and Section 14.7 (Transport in bulk according to IMO instruments).

b) Abbreviations and acronyms:

Acute Tox. 4: Acute toxicity Category 4

Asp. Tox. 1: Aspiration toxicity Category 1

Eye Dam. 1: Serious eye damage Category 1

Eye Irrit. 2: Eye Irritation Category 2

Flam. Liq. 3: Flammable liquid Category 3

Skin Irrit. 2: Skin Irritation Category 2

Aquatic Acute 1: Hazardous to the aquatic Environment, Acute Aquatic Hazard Category 1

Aquatic Chronic 1: Hazardous to the aquatic Environment, Long term Aquatic Hazard Category 1

Aquatic Chronic 2: Hazardous to the aquatic Environment, Long term Aquatic Hazard Category 2

STOT SE 3: Specific Target Organ Toxicity Single Exposure Category 3

c) Key literature references and sources for data:

Albaugh Europe Sàrl

ECHA Guidance on the compilation of safety data sheets

ECHA guidance on the Application of the CLP Criteria

Data out of protection from similar mixtures

SDS of the data owner

d) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) 1272/2008	Classification procedure
Flam. Liq. 3 – H226	On basis of study data
Eye Irrit. 2 – H319	On basis of study data
STOT SE 3 – H335 STOT SE 3 – H336	On basis of the components
Asp. Tox. 1 – H304	On basis of the components
Aquatic Acute 1 – H400 Aquatic Chronic 1 – H410	On basis of study data

e) Relevant H-statements and precautionary statements not written out in full under Sections 2 to 15:

H302 Harmful if swallowed
 H312 Harmful in contact with skin.
 H315 Causes skin irritation
 H318 Causes serious eye damage
 H319 Causes serious eye irritation.
 H400 Very toxic to aquatic life.
 H411 Toxic to aquatic life with long lasting effects.

f) Training advice:

General occupational hygiene training recommended.

g) Further information:

The information and recommendations in this publication are, to the best of our knowledge, information and belief, accurate at the date of publication. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the user to determine the applicability of such information or the suitability of any products for their own particular purpose. This Material Safety Data Sheet was compiled by Albaugh Europe Sàrl (sds@albaugh.eu) in compliance with Regulation (EC) 1907/2006 as amended by 2020/878.