



SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1272/2008 and 1999/45/EC or 67/548/EEC.

FLYFLO

Revision Date	23-September-2021	Version 2	Product No JTA/UK/016
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

FLYFLO

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

Recommended Use	Herbicide
Uses advised against	No information available

1.3. Details of the supplier of the safety data sheet

Supplier Address	JT Agro Ltd 126-134 Baker Street, London W1U 6UE, UK. Tel: +44 1628 421 890 Fax: +44 1628 421623
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For further information, please contact

Email address	jaitej@jtagro-cropthetics.co.uk
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1.4. Emergency telephone number

Emergency Telephone	National Chemical Emergency Centre (UK): Tel: 01865 407333 (24 hours)
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Section 2: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Acute aquatic toxicity	Category 1 – (H400)
Hazardous to the Aquatic Environment – Chronic Hazard	Category 1 – (H410)

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

Classification according to Directive 67/548/EEC or 1999/45/EC

N, Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of R-phrases: see section 16

2.2. Label elements

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



Signal word	Warning	
Hazard Statements	H410	Very toxic to aquatic life with long lasting effects
Precautionary Statements	P102 P501	Keep out of reach of children 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.
EU Specific Hazard Statements.	EUH208 EUH401	Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction. To avoid risks to human health and the environment comply with the instructions for use.
Additional phrases for PPP container	SP1	Do not contaminate water with product or its container

Hazardous components which must be listed on the label

Diflufenican

1,2-Benzisothiazolin-3-one

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight-w/w%	CAS No	Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Classification according to 67/548/EEC	M-Factor	REACH Registration Number
Diflufenican	40-44	83164-33-4	616-032-00-9	Aquatic Chronic 3 (H412)	R52/53	-	-

Full text of R phrases: see section 16

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

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	Have the product container, label or Material Safety Data Sheet with you when calling an emergency number, a poison control centre or physician, or going for treatment.
Inhalation	Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control centre immediately.
Skin Contact	Take off all contaminated clothing immediately. Wash off immediately with plenty of soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required
Ingestion	If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Rinse mouth.
Self-protection of the first aider	Use personal protective equipment as required.

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

Symptoms	No information available
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4.3. Indication of any immediate medical attention and special treatment needed

Medical advice	There is no specific antidote available. Treat symptomatically.
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Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

5.2. Special hazards arising from the substance or mixture

No specific hazard known.

5.3. Advice for firefighters

Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from firefighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required.
Refer to protective measures listed in sections 7 and 8

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/ national regulations (see section 13).

If the product contaminates rivers and lakes or drains inform respective authorities

6.4. Reference to other section

Reference to protective measures listed in section 7 and 8.
Refer to disposal consideration listed in section 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.
Use only with adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Derived No Effect Level (DNEL)	No information available
Predicted No Effect Concentration (PNEC)	No information available

8.2. Exposure controls

Engineering Controls	Ensure adequate ventilation, especially in confined areas.
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Protective measures	The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal
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protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

Respiratory Protection

A combination gas, vapour and particulate respirator may be necessary until effective technical measures are installed. Protection provided by air purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances when air-purifying respirators may not provide adequate protection

Hand protection

Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure.

Eye protection

If eye contact is possible, use tight-fitting chemical safety goggles and a face shield.

Skin and body protection

Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation/penetration

characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots etc.). Wear as appropriate: impervious protective suit.

General hygiene considerations

When using do not eat drink or smoke. Wash contaminated clothing before re-use.

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

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical State	Liquid		
Colour	White to light grey/beige		
Odour	Mildly acidic		
Odour threshold	No data available		
pH	6.5 – 9.5	CIPAC MT 75.3	
Melting point/freezing point °C	N/A		Not applicable
Boiling point/boiling range °C	No data available		
Flash point °C	> 100	EEC A9	
Evaporation rate	Not applicable		

Flammability (solid, gas)	Not Applicable for liquid		
Upper/lower flammability or explosive properties	No data available		
Vapour pressure kPa	-		Not Applicable
Vapour density	No data available		
Relative density	1.19 g/ml	OECD 109	
Solubility in other solvent	No data available		
Partition Coefficient (n-octanol/water) Log Pow	Not Applicable See Section 12 for more information		
Autoignition temperature °C	550	EEC A. 15	
Decomposition temperature °C	No data available		
Kinematic viscosity mm ² /s 40 °C	1706	OECD 114	
Explosive properties	Not an explosive	EEC A. 14	
Oxidizing properties	No oxidation	EEC A. 21	

9.2. Other information

None

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

No information available

10.6. Hazardous decomposition products

Combustion or thermal decomposition may evolve toxic and irritant vapors.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute toxicity

	Values	Species	Method	Remarks
Acute oral LD50 mg/kg	>2000	Rat	OECD 401	
Acute dermal LD50 mg/kg	> 4000	Rat	OECD 402	
Acute Inhalation LC50 mg/l/4h	> 1.43	Rat	OECD 403	Maximum attainable concentration
Skin corrosion/irritation	Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	Not irritating to eyes	Rabbit	OECD 405	
Respiratory/skin sensitization	Not a skin sensitizer	Guinea pig	OECD 406	

Chronic toxicity

Germ cell mutagenicity

Chemical Name

Diflufenican Not classified

Carcinogenicity

Chemical Name

Diflufenican Not Carcinogenic

Reproductive toxicity

Chemical Name

Diflufenican Not toxic for the reproductive system

STOT – single exposure

Chemical Name

Diflufenican No data available

STOT – repeated exposure

Chemical Name

Diflufenican No data available

Aspiration hazard

Chemical Name

Diflufenican No data available

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity

Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	> 100	Rainbow trout	OECD 203	
Crustacea 48-hour EC50 mg/l	>100	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	0.00174	S. Capricornutum	OECD 201	
Other plants EC50 mg/l	No data available			

Terrestrial toxicity

Birds-Oral LD50 mg/l

Chemical Name

Diflufenican > 2150 Bobwhite Quail

Bees-Oral LD50 µg/bee

Chemical Name

Diflufenican > 100 EPPO 170

12.2. Persistence and degradability

Abiotic Degradation

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Water DT50 days			
Chemical Name			
Diflufenican	1-5 days	BBA IV: 5-1	Approx.

Soil DT 50 days

FLYFLO – (Diflufenican 500g/l SC)

Revision Date 23-September-2021

Chemical Name

Diflufenican 128 days

EPA/SETAC

Biodegradation**Chemical Name**

Diflufenican No Information available

12.3. Bio-accumulative potential

Partition Coefficient (n-octanol/water) Log Pow Chemical Name	Values	Method	Remarks
Diflufenican	4.2	OECD 107	21 °C

Bioconcentration factor (BCF)**Chemical Name**

Diflufenican 1276-1596 OECD 305

12.4. Mobility in soil

Adsorption/Desorption Chemical Name	Values	Method	Remarks
Diflufenican	3417		Koc

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

12.6. Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused product	Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations
Contaminated packaging	Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO

14.1	UN/ID No	3082
14.2	Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diflufenican)
14.3	Transport Hazard Class (es)	9
14.4	Packing Group	III
14.5	Marine pollutant	Yes
14.6	Special precautions for user	

RID/ADR

14.1	UN/ID No	3082
14.2	Proper shipping name E	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diflufenican)
14.3	Transport Hazard Class (es)	9
14.4	Packing Group	III
14.5	Marine pollutant	Yes
14.6	Special precautions for user	

ICAO/IATA

14.1	UN/ID No	3082
14.2	Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diflufenican)
14.3	Transport Hazard Class (es)	9
14.4	Packing Group	III
14.5	Marine pollutant	Yes
14.6	Special precautions for user	None
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

GHS-Labeling



Signal word	Warning	
Hazard Statements	H410	Very toxic to aquatic life with long lasting effects
Precautionary Statements	P102	Keep out of reach of children

FLYFLO – (Diflufenican 500g/l SC)

Revision Date 23-September-2021

	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.
EU Specific Hazard Statements	EUH208	Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.
	EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
Additional phrases for PPP	SP1	Do not contaminate water with product or its container

15.2. Chemical safety assessment

A chemical safety assessment according to regulation (EC) No. 1272/2008 is not required. A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009.

Section 16: OTHER INFORMATION

Further information

Product Name: FLYFLO

Approval number: MAPP 19242

Use plant protection products safely. Always read the label and product information before use.

Full text of R-phrases referred to under sections 2 and 3

- R50/53 Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment
Harmful to aquatic organisms; may cause long term adverse effects in the aquatic environment.
- R52/53

Full text of H-Statements referred to under sections 2 and 3

- H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H412 Harmful to aquatic life with long lasting effects

This material safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008 and and 1999/45/EC or 67/548/EEC.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

