



## SAFETY DATA SHEET

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

### FLYFLO

Revision Date 22-October-2019

Version 2

Product No JTA/UK/005

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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

For further information, please contact

Email address

jaitej@jtagro-cropthetics.co.uk

### 1.4. Emergency telephone number

Emergency Telephone

National Chemical Emergency Centre (UK):  
Tel: 01865 407333 (24 hours)

## 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

Category 1 - (H410)

Environment - Chronic Hazard

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]



<b>Signal word</b>	Warning	
<b>Hazard Statements</b>	H410	Very toxic to aquatic life with long lasting effects
<b>Precautionary Statements</b>	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.
<b>EU Specific Hazard Statements.</b>	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.
<b>Additional phrases for PPP</b>	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

<b>General advice</b>	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.
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<b>Inhalation</b>	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.
<b>Skin Contact</b>	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.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required
<b>Ingestion</b>	If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Rinse mouth.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

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

**Symptoms** No information available

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

**Medical advice** There is no specific antidote available. Treat symptomatically.

### **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.

**Protective measures** The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

<b>Respiratory Protection</b>	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
<b>Hand protection</b>	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.
<b>Eye protection</b>	If eye contact is possible, use tight-fitting chemical safety goggles and a face shield.
<b>Skin and body protection</b>	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.
<b>General hygiene considerations</b>	When using do not eat drink or smoke. Wash contaminated clothing before re-use.
<b>Environmental exposure controls</b>	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>
<b>Appearance</b>			
<b>Physical State</b>	Liquid		
<b>Colour</b>	White to light grey/beige		
<b>Odour</b>	Mildly acidic		
<b>Odour threshold</b>	No data available		
<b>pH</b>	6.5 - 9.5	CIPAC MT 75.3	
<b>Melting point/freezing point °C</b>	N/A		Not applicable
<b>Boiling point/boiling range °C</b>	No data available		
<b>Flash point °C</b>	> 100	EEC A9	
<b>Evaporation rate</b>	Not applicable		

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

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

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

**Terrestrial toxicity****Birds-Oral LD50 mg/l****Chemical Name**

Diflufenican &gt; 2150 Bobwhite Quail

**Bees-Oral LD50 µg/bee****Chemical Name**

Diflufenican &gt; 100 EPPO 170

**12.2. Persistence and degradability**

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

**Soil DT 50 days****Chemical Name**

Diflufenican	128 days	EPA/SETAC
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**Biodegradation****Chemical Name**

Diflufenican	No Information available
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**12.3. Bio-accumulative potential**

<b>Partition Coefficient (n-octanol/water) Log Pow Chemical Name</b>	<b><u>Values</u></b>	<b><u>Method</u></b>	<b><u>Remarks</u></b>
Diflufenican	4.2	OECD 107	21 °C
<b>Bioconcentration factor (BCF) Chemical Name</b>			
Diflufenican	1276-1596	OECD 305	

**12.4. Mobility in soil**

<b>Adsorption/Desorption Chemical Name</b>	<b><u>Values</u></b>	<b><u>Method</u></b>	<b><u>Remarks</u></b>
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**

<b>Waste from residues/unused product</b>	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
<b>Contaminated packaging</b>	Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers
<b>Other Information</b>	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

<b>Hazard Statements</b>	H410	Very toxic to aquatic life with long lasting effects
<b>Precautionary Statements</b>	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.
<b>EU Specific Hazard Statements</b>	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.
<b>Additional phrases for PPP</b>	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
R52/53	Harmful to aquatic organisms; may cause long term adverse effects in the aquatic environment.

### 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

