## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

| | |
|---|---|
| **Trade name** | COLISEUM |
| **Product code (UVP)** | 85855182 |
| **UFI** | 68J2-A0UF-A00S-DYWX (for Northern Ireland only) |

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

| | |
|---|---|
| **Use** | Herbicide |

### 1.3 Details of the supplier of the safety data sheet

| | |
|---|---|
| **Supplier** | Bayer CropScience Limited<br>PO Box 1582<br>CB1 0FE Cambridge<br>United Kingdom |
| **Telephone** | +44(0)1223 226500 |
| **FOR NORTHERN IRELAND:** | Bayer CropScience Ltd<br>Bayer Ltd<br>1st Floor, The Grange Offices<br>The Grange, Brewery Road<br>Stillorgan<br>Co. Dublin<br>A94 H2K7<br>Ireland |
| **Telephone** | +353 1 216 3300 |
| **Responsible Department** | Email: gb-bcs-crop-regulatory-affairs@bayer.com |

### 1.4 Emergency telephone no.

| | |
|---|---|
| **Emergency telephone no.** | 0330 678 3382 (24 hr)<br>For Medical Professionals:<br>You can also contact the relevant NPIS.<br><br>For Members to the Public:<br>You can contact NHS111 (for GB) or your local GP (for Northern Ireland)<br><br>National Poisons Information Centre UK: 0344 892 0111<br>National Poisons Information Centre Dublin: +353 1 809 2166 |

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Acute toxicity: Category 4
H302 Harmful if swallowed.

Specific target organ toxicity - repeated exposure: Category 2
H373 May cause damage to organs (Nervous system) through prolonged or repeated exposure if swallowed.

Short-term (acute) aquatic hazard: Category 1
H400 Very toxic to aquatic life.

Long-term (chronic) aquatic hazard: Category 1
H410 Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements

**Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Hazard label for supply/use required.

**Hazardous components which must be listed on the label:**

- Flufenacet
- Diflufenican

**Signal word**: Warning

**Hazard statements**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H373 | May cause damage to organs (Nervous system) through prolonged or repeated exposure if swallowed. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| EUH208 | Contains Flufenacet, reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1). May produce an allergic reaction. |
| EUH401 | To avoid risks to human health and the environment, comply with the instructions for use. |

**Precautionary statements**

| | |
|---|---|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P308 + P311 | IF exposed or concerned: Call a POISON CENTER/ doctor/ physician. |
| 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. |

### 2.3 Other hazards

No additional hazards known beside those mentioned.

Diflufenican: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB). Flufenacet: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

**Chemical nature**

Suspension concentrate (=flowable concentrate)(SC)
Flufenacet 400 g/l, Diflufenican 100 g/l

**Hazardous components**

Hazard statements according to Regulation (EC) No. 1272/2008

| Name | CAS-No. / EC-No. / REACH Reg. No. | Classification REGULATION (EC) No 1272/2008 | Conc. [%] |
|---|---|---|---|

Hazard statements according to Regulation (EC) No. 1272/2008

| Name | CAS-No. / EC-No. / REACH Reg. No. | Classification REGULATION (EC) No 1272/2008 | Conc. [%] |
|---|---|---|---|
| Flufenacet | 142459-58-3 | Aquatic Acute 1, H400<br>STOT RE 2, H373<br>Skin Sens. 1, H317<br>Acute Tox. 4, H302<br>Aquatic Chronic 1, H410 | 33.6 |
| Diflufenican | 83164-33-4 | Aquatic Chronic 1, H410<br>Aquatic Acute 1, H400 | 8.4 |
| 1,2-Benzisothiazol-3(2H)-one | 2634-33-5<br>01-2120761540-60-XXXX | Acute Tox. 4, H302<br>Acute Tox. 2, H330<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | >= 0.036 – < 0.1 |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3- | 55965-84-9<br>01-2120764691-48-XXXX | Acute Tox. 3, H301<br>Acute Tox. 2, H310 | >= 0.00015 – < 0.0015 |

| | | | |
|---|---|---|---|
| one and 2-methyl-2H-isothiazol-3- one (3:1) | | Acute Tox. 2, H330<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | |
| Glycerine | 56-81-5<br>01-2119471987-18-XXXX | Not classified | >= 1.0 |
| Flufenacet | 142459-58-3 | Aquatic Acute 1, H400<br>STOT RE 2, H373<br>Skin Sens. 1, H317<br>Acute Tox. 4, H302<br>Aquatic Chronic 1, H410 | 33.60 |
| Diflufenican | 83164-33-4 | Aquatic Chronic 1, H410<br>Aquatic Acute 1, H400 | 8.4 |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1) | 55965-84-9<br>01-2120764691-48-XXXX | Acute Tox. 3, H301<br>Acute Tox. 2, H310<br>Acute Tox. 2, H330<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | > 0.00015 – < 0.0015 |
| Glycerine | 56-81-5<br>01-2119471987-18-XXXX | Not classified | > 1 |
| Pyrogenic (fumed) amorphous silica | 112945-52-5<br>01-2119379499-16-XXXX | Not classified | <= 0.5 |

**Further information**

| | | |
|---|---|---|
| 1,2-Benzisothiazol-3(2H)-one | 2634-33-5 | SCL: Skin Sens. 1A; H317: SCL >= 0.036 % |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Skin Corr. 1C; H314: SCL >= 0.6 % |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Skin Irrit. 2; H315: SCL 0.06 - < 0.6 % |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Eye Irrit. 2; H319: SCL 0.06 - < 0.6 % |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Skin Sens. 1A; H317: SCL >= 0.0015 % |
| reaction mass of 5-chloro-2- methyl-2H- | 55965-84-9 | SCL: Eye Dam. 1; H318: SCL >= 0.6 % |

| | | |
|---|---|---|
| isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | | |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Skin Corr. 1C; H314: SCL >= 0.6 % |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Skin Irrit. 2; H315: SCL 0.06 - < 0.6 % |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Eye Irrit. 2; H319: SCL 0.06 - < 0.6 % |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Skin Sens. 1A; H317: SCL >= 0.0015 % |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9 | SCL: Eye Dam. 1; H318: SCL >= 0.6 % |

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

**Particle characteristics**

This substance/ mixture does not contain nanoforms (according to REACH Regulation)

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice** Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.

**Inhalation** Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.

**Skin contact** Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

| | |
|---|---|
| **Ingestion** | Call a physician or poison control center immediately. Rinse mouth. Induce vomiting only, if: 1. patient is fully conscious, 2. medical aid is not readily available, 3. a significant amount (more than a mouthful) has been ingested and 4. time since ingestion is less than 1 hour. (Vomit should not get into the respiratory tract.) |

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

| | |
|---|---|
| **Symptoms** | If large amounts are ingested, the following symptoms may occur:<br>Shortness of breath, Drowsiness, Headache, Tiredness, Dizziness, Nausea, Breathing difficulties, tachycardia<br>Symptoms and hazards refer to effects observed after intake of significant amounts of the active ingredient(s).<br>The absorption of this product into the body may lead to the formation of methaemoglobine that, in sufficient concentration, causes cyanosis. |

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

| | |
|---|---|
| **Risks** | Danger of formation of methaemoglobin. |
| **Treatment** | Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. In case of methaemoglobinemia, oxygen and specific antidotes (methylene blue/ toluidine blue) should be given. |

## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media**

| | |
|---|---|
| **Suitable** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Unsuitable** | High volume water jet |
| **5.2 Special hazards arising from the substance or mixture** | In the event of fire the following may be released:, Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Nitrogen oxides (NOx), Sulphur oxides |

**5.3 Advice for firefighters**

| | |
|---|---|
| **Special protective equipment for firefighters** | In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit. |
| **Further information** | Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses. |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

| | |
|---|---|
| **Precautions** | Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. |

| | |
|---|---|
| **6.2 Environmental precautions** | If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060). Do not allow to get into surface water, drains and ground water. |

**6.3 Methods and materials for containment and cleaning up**

| | |
|---|---|
| **Methods for cleaning up** | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations. |
| **Additional advice** | Check also for any local site procedures. |
| **6.4 Reference to other sections** | Information regarding safe handling, see section 7.<br>Information regarding personal protective equipment, see section 8.<br>Information regarding waste disposal, see section 13. |

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling**

| | |
|---|---|
| **Advice on safe handling** | No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation. |
| **Advice on protection against fire and explosion** | Keep away from heat and sources of ignition. |
| **Hygiene measures** | Avoid contact with skin, eyes and clothing. Keep working clothes separately. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt). Wash hands before breaks and immediately after handling the product. |

**7.2 Conditions for safe storage, including any incompatibilities**

| | |
|---|---|
| **Requirements for storage areas and containers** | Store in a place accessible by authorized persons only. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from frost. Keep away from direct sunlight. |
| **Advice on common storage** | Keep away from food, drink and animal feedingstuffs. |
| **Suitable materials** | HDPE (high density polyethylene) |
| **7.3 Specific end use(s)** | Refer to the label and/or leaflet. |

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

| Components | CAS-No. | Control parameters | Update | Basis |
|---|---|---|---|---|
| Flufenacet | 142459-58-3 | 0.3 mg/m3 (SK-SEN) | | OES BCS* |
| Diflufenican | 83164-33-4 | 5.5 mg/m3 | | OES BCS* |

| | | | | |
|---|---|---|---|---|
| | | (TWA) | | |
| Glycerine<br><br>(Mist.) | 56-81-5 | 10 mg/m3<br>(TWA) | 2007 | EH40 WEL |
| Diflufenican | 83164-33-4 | 5.5 mg/m3<br>(TWA) | | OES BCS* |
| Flufenacet | 142459-58-3 | 0.3 mg/m3<br>(SK-SEN) | | OES BCS* |

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

**8.2 Exposure controls**

**Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.**

**Personal protective equipment**
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**Respiratory protection**

Respiratory protection is not required under anticipated circumstances of exposure.
Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

**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.

| | |
|---|---|
| Material | Nitrile rubber |
| Rate of permeability | > 480 min |
| Glove thickness | > 0.4 mm |
| Protective index | Class 6 |
| Directive | Protective gloves complying with EN 374. |

**Eye protection**

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

**Skin and body protection**

Wear standard coveralls and Category 3 Type 4 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.
If there is a risk of significant exposure, consider a higher protective type suit.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Form** | suspension |
| **Colour** | white to beige |
| **Odour** | weak, characteristic |
| **Odour Threshold** | No data available |
| **Melting point/ range** | No data available |
| **Boiling Point** | No data available |
| **Flammability** | No data available |
| **Upper explosion limit** | No data available |
| **Lower explosion limit** | No data available |
| **Flash point** | > 100 °C<br>No flash point - Determination conducted up to the boiling point. |
| **Auto-ignition temperature** | No data available |
| **Self-accelarating decomposition temperature (SADT)** | No data available |
| **pH** | 4.0 - 6.5 (100 %) (23 °C) |
| **Viscosity, dynamic** | 250 - 400 mPa.s (20 °C)<br>Velocity gradient 20 /s |
| **Viscosity, kinematic** | No data available |
| **Water solubility** | dispersible |
| **Partition coefficient: n-octanol/water** | Diflufenican: log Pow: 4.2<br><br>Flufenacet: log Pow: 3.2 |
| **Vapour pressure** | No data available |
| **Density** | ca. 1.19 g/cm³ (20 °C) |
| **Relative density** | No data available |
| **Relative vapour density** | No data available |
| **Assessment nano particles** | This substance/ mixture does not contain nanoforms (according to REACH Regulation) |
| **Particle size** | No data available |

### 9.2 Other information

| | |
|---|---|
| **Explosivity** | No data available |
| **Oxidizing properties** | No data available |
| **Evaporation rate** | No data available |
| **Other physico-chemical properties** | Further safety related physical-chemical data are not known. |

## SECTION 10: STABILITY AND REACTIVITY

| | |
|---|---|
| **10.1 Reactivity** | Stable under normal conditions. |
| **10.2 Chemical stability** | Stable under recommended storage conditions. |
| **10.3 Possibility of hazardous reactions** | No hazardous reactions when stored and handled according to prescribed instructions. |
| **10.4 Conditions to avoid** | Extremes of temperature and direct sunlight. |
| **10.5 Incompatible materials** | Store only in the original container. |
| **10.6 Hazardous decomposition products** | No decomposition products expected under normal conditions of use. |

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on hazard classes as defined in regulation (EC) No 1272/2008

| | |
|---|---|
| **Acute oral toxicity** | LD50 (Rat) > 500 - < 2,000 mg/kg<br>Test conducted with a similar formulation. |
| **Acute inhalation toxicity** | LC50 (Rat) > 2.078 mg/l<br>Exposure time: 4 h<br>Highest attainable concentration.<br>Test conducted with a similar formulation. |
| **Acute dermal toxicity** | LD50 (Rat) > 4,000 mg/kg<br>Test conducted with a similar formulation. |
| **Skin corrosion/irritation** | No skin irritation (Rabbit)<br>Test conducted with a similar formulation. |
| **Serious eye damage/eye irritation** | No eye irritation (Rabbit)<br>Test conducted with a similar formulation. |
| **Respiratory or skin sensitisation** | Skin: Non-sensitizing. (Mouse)<br>OECD Test Guideline 429, local lymph node assay (LLNA) |

**Assessment STOT Specific target organ toxicity – single exposure**

Diflufenican: Based on available data, the classification criteria are not met.
Flufenacet: Based on available data, the classification criteria are not met.

**Assessment STOT Specific target organ toxicity – repeated exposure**

Diflufenican did not cause specific target organ toxicity in experimental animal studies.
Flufenacet caused neurobehavioral effects and/or neuropathological changes in animal studies.

**Assessment mutagenicity**

Diflufenican was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Flufenacet was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**

Diflufenican was not carcinogenic in lifetime feeding studies in rats and mice.
Flufenacet was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**

Diflufenican did not cause reproductive toxicity in a two-generation study in rats.
Flufenacet did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**

Diflufenican did not cause developmental toxicity in rats and rabbits.
Flufenacet caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Flufenacet are related to maternal toxicity.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**11.2 Information on other hazards**

**Endocrine disrupting properties**

| | |
|---|---|
| **Assessment** | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |

## SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity**

| | |
|---|---|
| **Toxicity to fish** | LC50 (Cyprinus carpio (Carp)) 54.9 mg/l<br>Exposure time: 96 h |
| **Chronic toxicity to fish** | Cyprinus carpio (Carp)<br>NOEC: 12.5 mg/l<br>Exposure time: 96 h |
| **Toxicity to aquatic invertebrates** | EC50 (Daphnia magna (Water flea)) 68.2 mg/l<br>Exposure time: 48 h |
| **Toxicity to aquatic plants** | EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.00885 mg/l<br>Growth rate; Exposure time: 72 h |
| | ErC50 (Raphidocelis subcapitata (freshwater green alga)) 8.85 µg/l<br>Growth rate; Exposure time: 72 h |
| | NOEC (Raphidocelis subcapitata (freshwater green alga)) 0.916 µg/l<br>Growth rate; Exposure time: 72 h |

ErC50 (Lemna gibba (gibbous duckweed)) 129 µg/l
Growth rate; Exposure time: 7 d

NOEC (Lemna gibba (gibbous duckweed)) < 25.0 µg/l
Growth rate; Exposure time: 7 d

**12.2 Persistence and degradability**

**Biodegradability** Diflufenican:
Not rapidly biodegradable
Flufenacet:
Not rapidly biodegradable

**Koc** Diflufenican: Koc: 3417
Flufenacet: Koc: 202

**12.3 Bioaccumulative potential**

**Bioaccumulation** Diflufenican: Bioconcentration factor (BCF) 1,596
Does not bioaccumulate.
Flufenacet: Bioconcentration factor (BCF) 71
Does not bioaccumulate.

**12.4 Mobility in soil**

**Mobility in soil** Diflufenican: criterion of mobility not fulfilled
Flufenacet: mobile in soil

**12.5 Results of PBT and vPvB assessment**

**PBT and vPvB assessment** Diflufenican: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Flufenacet: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

**12.6 Endocrine disrupting properties**

**Assessment** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**12.7 Other adverse effects**

**Additional ecological information** No other effects to be mentioned.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product** In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant. Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

| | |
|---|---|
| **Contaminated packaging** | Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times.<br>Add washings to sprayer at time of filling.<br>Dispose of empty and cleaned packaging safely.<br>Follow advice on product label and/or leaflet. |

## SECTION 14: TRANSPORT INFORMATION

**ADR/RID/ADN**

| | |
|---|---|
| 14.1 UN number | **3082** |
| 14.2 Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(FLUFENACET, DIFLUFENICAN SOLUTION) |
| 14.3 Transport hazard class(es) | 9 |
| 14.4 Packaging Group | III |
| 14.5 Environm. Hazardous Mark | YES |
| Hazard no. | 90 |
| Tunnel Code | - |

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

**IMDG**

| | |
|---|---|
| 14.1 UN number | **3082** |
| 14.2 Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(FLUFENACET, DIFLUFENICAN SOLUTION) |
| 14.3 Transport hazard class(es) | 9 |
| 14.4 Packaging Group | III |
| 14.5 Marine pollutant | YES |

**IATA**

| | |
|---|---|
| 14.1 UN number | **3082** |
| 14.2 Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(FLUFENACET, DIFLUFENICAN SOLUTION ) |
| 14.3 Transport hazard class(es) | 9 |
| 14.4 Packaging Group | III |
| 14.5 Environm. Hazardous Mark | YES |

**UK 'Carriage' Regulations**

| | |
|---|---|
| 14.1 UN number | **3082** |
| 14.2 Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(FLUFENACET, DIFLUFENICAN SOLUTION) |
| 14.3 Transport hazard class(es) | 9 |
| 14.4 Packaging Group | III |
| 14.5 Environm. Hazardous Mark | YES |
| Emergency action code | 3Z |

**14.6 Special precautions for user**

See sections 6 to 8 of this Safety Data Sheet.

**14.7 Transport in bulk according to IMO instruments**
No transport in bulk according to the IBC Code.

## SECTION 15: REGULATORY INFORMATION

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

**UK and Northern Ireland Regulatory References**

This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

**Transport**

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348)
Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367)
Air Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)

**Supply and Use**

Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)
Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009
Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677)
EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits
Control of Pesticide Regulations 1986
Dangerous Substances and Explosive Atmospheres Regulations 2002

**Waste Treatment**

Environmental Protection Act 1990, Part II
Environmental Protection (Duty of Care) Regulations 1991
The Waste Management Licensing Regulations 1994 (as amended)
Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended)
Landfill Directive
Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)
Water Resources Act 1991
Anti-Pollution Works Regulations 1999

**Further information**

WHO-classification: II (Moderately hazardous)

## SECTION 16: OTHER INFORMATION

**Text of the hazard statements mentioned in Section 3**

| | |
|---|---|
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H310 | Fatal in contact with skin. |

| | |
|---|---|
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**Abbreviations and acronyms**

| | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute toxicity estimate |
| CAS-Nr. | Chemical Abstracts Service number |
| Conc. | Concentration |
| EC-No. | European community number |
| ECx | Effective concentration to x % |
| EH40 WEL | Worker Exposure Limit |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| EN | European Standard |
| EU | European Union |
| IATA | International Air Transport Association |
| IBC | International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) |
| ICx | Inhibition concentration to x % |
| IMDG | International Maritime Dangerous Goods |
| LCx | Lethal concentration to x % |
| LDx | Lethal dose to x % |
| LOEC/LOEL | Lowest observed effect concentration/level |
| MARPOL | MARPOL: International Convention for the prevention of marine pollution from ships |
| N.O.S. | Not otherwise specified |
| NOEC/NOEL | No observed effect concentration/level |
| OECD | Organization for Economic Co-operation and Development |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SI | Statutory Instrument |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

The above information is intended to give general health and safety guidance on the storage and transport of the product.
It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with.
The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.
The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.

No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

**Reason for Revision:** New Safety Data Sheet.

The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.