



The Syngenta logo, consisting of the word "syngenta" in a lowercase, sans-serif font with a leaf-like shape above the 'y', set against a yellow background.

**GROUP 2 | 4 HERBICIDES**

**Product registration number:** MAPP 19276  
**UFI:** QRT2-M036-V00M-34DJ

A water dispersible granule containing 40 g/kg prosulfuron, 400 g/kg dicamba and 100 g/l nicosulfuron.

Herbicide for the the control of annual and pernnial broad-leaved and grassweeds in maize.

*The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.*

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**In case of toxic or transport emergency ring +44 (0) 1484 538444 any time.**

**PROTECT FROM FROST. SHAKE WELL BEFORE USE**

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 the SYNGENTA Logo and the PURPOSE ICON  
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L1101246 GBRI/03B PPE 4179447

**1 kg**



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**SPANDIS®**

A water dispersible granule containing 40 g/kg prosulfuron, 400 g/kg dicamba and 100 g/kg nicosulfuron.

**Warning**

**Causes serious eye irritation.**

**Very toxic to aquatic life with long lasting effects.**

Wash skin thoroughly after handling.

Wear eye protective/face protection.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Collect spillage.

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.

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



**MAPP 19276 UFI: QRT2-M036-V00M-34DJ**

**IMPORTANT INFORMATION**

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crop	Maximum individual dose (kg product/ha)	Maximum number of applications	Latest time of application
Grain Maize, Forage Maize	0.4	1 per crop	Up to and including 8 true leaves (GS18)

**Other Specific Restrictions:** To avoid the build up of resistance do not apply this or any other product containing an ALS inhibitor herbicide with claims for control of grass-weeds more than once to any crop. The earliest time of application is 01 June.

Use shall be limited to one application every three years on the same field at a maximum dose of 20g active substance (prosulfuron) per hectare.

Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

## **SAFETY PRECAUTIONS**

### **(a) Operator protection**

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

**WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACE SHIELD)** when handling the product. However engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection

**WASH ALL PROTECTIVE CLOTHING** thoroughly after use, especially the insides of gloves.

**AVOID ALL CONTACT WITH SKIN.**

**WASH HANDS AND EXPOSED SKIN** before eating and drinking and after work.

### **(b) Environmental protection**



Since there is a risk to aquatic life from use, users not applying the statutory buffer zone must either themselves carry out or ensure that someone else has carried out a Local Environment Risk Assessment for Pesticides (LERAP) on their behalf before each spraying operation from a horizontal boom sprayer. Users must not allow direct spray from such sprayers to fall within

5m of the top of the bank of any static or flowing waterbody or within 1m of a ditch which is dry at the time of application (these distances to be measured as set out in the booklet 'Local Environment Risk Assessment for Pesticides - Horizontal Boom Sprayers' and any amendments that are made to it) unless:

(a) The LERAP indicates that a narrower buffer zone will be sufficient; and

(b) Any measures indicated by the LERAP as justifying the narrower buffer zone are complied with in full and in accordance with any conditions applicable to them.

Spray must be aimed away from water.

The results of the LERAP must be recorded in written form and must be available for a period of three years for inspection to any person entitled to exercise enforcement powers under or in connection with the Plant Protection Products Regulations 2011 or the Plant Protection Products (Sustainable Use) Regulations 2012. (An electronic record will satisfy the requirement for a written record, providing it is similarly available for inspection and can be copied). Detailed guidance on LERAPs and how to conduct a LERAP are contained in the booklet 'Local Environment Risk Assessment for Pesticides - Horizontal Boom Sprayers', available from HSE Chemicals Regulation Division's website. All LERAPs must be carried out in accordance with this Guidance and any amendments that are made to it.

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

### **(c) Storage and disposal**

**KEEP IN ORIGINAL CONTAINER**, tightly closed in a safe place.

**RINSE CONTAINER THOROUGHLY** by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.

## **DIRECTIONS FOR USE**

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order to obtain safe and successful use of this product.

## **RESTRICTIONS**

Do not apply to forage maize and grain maize grown for seed production.

Do not mix with adjuvant oils or fertilisers except as specified on this label.

Do not apply with organo-phosphate insecticides.

Only treat healthy maize, preferably in good growing conditions, when the vegetation is dry.

SPANDIS is generally highly selective of maize. In exceptional situations (cold, heavy rain), use of SPANDIS can temporarily slow down growth.

Do not use during periods of frosty weather, when frost is imminent, or onto crops under stress from frost, water logging, insect attack or drought.

Special care should be taken to avoid damage by drift to broad-leaved plants outside the target area or land intended for cropping e.g. lucerne, sugar beet, sunflower, oilseed rape, peas, vegetable crops, potatoes, soybean, floral and ornamental crops, vines and fruit trees.

Optimum temperature for application: 10 - 25°C. It is preferable to postpone application if an unfavourable weather period is expected (daily range of temperatures greater than 15°C, cold periods with temperatures lower than 10°C on the 3 days prior to, or following application).

Ensure spraying equipment is thoroughly washed out according to specific instructions after use. Do not allow washings-out to drain onto land intended for cropping or growing crops.

Do not mix with liquid fertilizers.

Do not apply SPANDIS in sequence or in tank-mix with a product containing any other ALS inhibiting herbicides.

## **WEEDS CONTROLLED**

SPANDIS is a herbicide based on prosulfuron, dicamba (sodium salt) and nicosulfuron. It is used in maize post-emergence of weeds for the control of annual and perennial broadleaved and grass weeds.

SPANDIS combines two different modes of action: it is absorbed by the leaves and roots of the plant, and it also has a residual activity on some sensitive weeds.

SPANDIS is available in the form of dispersible granules.

Always use SPANDIS with Adigor, Biopower or Hyspray.

SPANDIS can be used to control the following weeds in maize:

<b>Weed species</b>	<b>SPANDIS at 0.4 kg/ha + adjuvant</b>	<b>Latest time of application</b>
<b>Broad leaved weeds</b>		
Common amaranthus	S	6 side shoots visible
Fat hen	S	Flower buds visible

Weed species	SPANDIS at 0.4 kg/ha + adjuvant	Latest time of application
Black nightshade	MR	6 true leaves
Field pansy	S	8 true leaves
Black bindweed	S	Flag leaf sheath opening
Redshank	S	8 true leaves
Common chickweed	S	Flower buds visible
Cleavers	S	End of heading, inflorescence fully emerged
Field bindweed	MR	3 side shoots visible
Red Deadnettle	S	Beginning of flowering (10% of flowers open)
Common field speedwell	R	8 true leaves
Pale persicaria	S	First side shoot visible
Shepherd's Purse	S	4 internodes
Gallant-soldier	S	8 true leaves
Scented mayweed	S	5 true leaves
Field pennycress	S	Full flowering (50% of flowers open and first petals may have fallen)
<b>Grass weeds</b>		
Blackgrass	MR	3 leaves unfolded
Couch Grass *	MS	4 tillers detectable
Italian millet/ Foxtail bristleglass	MS	4 leaves unfolded
Cockspur	MS	Inflorescence of flower buds visible, first spikelet just visible
Hairy finger grass	MR	2 leaves unfolded
Annual meadow grass	S	3 leaves unfolded

KEY: S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant.

\*Long term control of common couch has not been established.

## WEED RESISTANCE

### Resistance Strategy

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominant.

A weed species is considered resistant to a herbicide if it survives correctly applied treatment at the recommended dose.

Development of resistance within a weed species can be avoided or delayed by sequencing or tank-mixing with suitable products having a different mode of action. This is particularly important if continuous maize is grown.

SPANDIS is a sulfonyleurea herbicide. Its mode of action is via ALS-inhibition. Use only as part of a resistance strategy that includes cultural methods of control and does not use SPANDIS or any other ALS-inhibitors as the sole chemical method of grass-weed control.

Strains of some annual grasses, e.g. black-grass, wild-oats, and Italian rye-grass, have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the AHDB, CPA, your distributor, crop adviser or product manufacturer.

This product contains nicosulfuron and prosulfuron which are ALS-inhibitors, also classified by the Herbicide Resistance Action Committee as 'Group 2'.

## **CROP SPECIFIC INFORMATION**

### **Timing and Rates of Use**

SPANDIS should be applied to the maize crop from 2 leaves emerged up to 8 leaves emerged.

The addition of an approved adjuvant is required (Adigor, Biopower, Hyspray). Always use adjuvants at their recommended rates.

## **FOLLOWING CROPS AND RECULTIVATION**

### Recultivation

Only maize can be re-drilled after a waiting period of 4 weeks and the soil has been ploughed in the case of crop failure.

### Rotational crops

Planting the following crops is not recommended: lucerne, sorghum sugar beet, sunflower.

Under adverse conditions (poor soil, low pH, dry cold winter etc) succeeding crops of Winter wheat, Winter Barley, and Peas may display symptoms of phytotoxicity, however these are transient and have no significant effect on yield

### Autumn

Winter wheat and winter barley can follow a forage maize and grain maize crop treated with SPANDIS provided the soil has been ploughed to a depth of 15cm

### Spring

Forage maize and grain maize, ryegrass, spring wheat and spring barley may be sown in the spring following application of SPANDIS, do not sow any other crop at this time.

## **MIXING AND SPRAYING**

### **Spray Volume**

Use a water volume of 200 - 400 litres per hectare.

### **Spray Nozzles**

A medium spray quality is preferred for application of SPANDIS (see BCPC guidelines).

A spray pressure of 2-3 bar is recommended.

### **Mixing and Spraying**

Make sure the sprayer is set to give an even application at the correct volume.

#### Dry Mixing - Sprayers with Induction Hoppers

Fill sprayer to 15% of tank capacity with water and start agitation. Pour SPANDIS into the induction hopper and open valve in bottom of hopper to suck the granules into the circulating spray mix. Continue adding SPANDIS until loading is complete. Wash down any granules on the hopper wall and close valve. Add the adjuvant and continue agitation whilst adding the rest of the water.

#### Note for Old Sprayers with Indirect Venturi Induction Hoppers

In the unlikely event of problems occurring during dry induction of the granules (blocked venturi), open the rinse ring and add water to the hopper. As soon as product induction continues, carry on adding product until the required amount is reached.

#### Sprayers Without Induction Hoppers

Fill sprayer with a minimum of 15 cm of water in the bottom and agitate vigorously. Pour SPANDIS through the sprayer lid. Add the adjuvant and continue agitation whilst adding the rest of the water. Agitate the mixture thoroughly before use and continue agitation during spraying.

Take particular care to avoid overlapping spray swathes.

Thoroughly wash all spray and measuring equipment with water according to the directions below immediately after use.

### **Washing-out instructions**

To avoid subsequent injury to crops, immediately after spraying thoroughly clean the application equipment and protective clothing. Ensure that all traces of product are removed. The following recommendations are to be strictly followed:

1. Drain spray system completely. Rinse tank, spray boom and nozzles with clean water for several minutes and spray out.
2. Half fill the spray tank with clean water and add to it sodium hypochlorite (5.2%) (commercial chlorine bleach) at a dose of 1 litre for every 200 litres of full spray tank capacity and continue filling with clean water until sprayer is completely full. Agitate for 15 minutes and spray out cleaning solution through spray nozzles.

3. To remove traces of chlorine bleach, rinse the tank thoroughly with clean water and flush out the hoses and boom.
4. Nozzles and filters should be removed and cleaned separately along with protective equipment.

PROTECT FROM FROST

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### **Section 6 of the Health and Safety at Work Act** **Additional Product Safety Information**

(This section does not form part of the product label under the Plant Protection Products Regulations 1995.)

The product label provides information on a specific pesticidal use of the product; do not use otherwise, unless you have assessed any potential hazard involved, the safety measures required and that the particular use has 'off-label' approval or is otherwise permitted under the Control of Pesticides Regulations.

The information on this label is based on the best available information including data from test results.

#### **Safety Data Sheet - V1.0**

#### **1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

##### **1.1 Product identifier**

Trade name: SPANDIS

Design Code: A18385B

Product Registration Number: MAPP 19276

Unique Formula Identifier (UFI): QRT2-M036-V00M-34DJ

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

Use of the Substance/Mixture: Herbicide

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

Company: Syngenta UK Ltd

CPC4, Capital Park, Fulbourn, Cambridge,

CB21 5XE, United Kingdom

Telephone: +44 (0) 1223 883400

Telefax: +44 (0) 1223 882195

E-mail address of person responsible for the SDS: [customer.services@syngenta.com](mailto:customer.services@syngenta.com)

##### **1.4 Emergency telephone number**

Syngenta +44 1484 538444



## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)


Eye irritation, Category 2 - H319: Causes serious eye irritation.

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 (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms	
	
Signal Word	Warning
Hazard Statements	H319 Causes serious eye irritation. H410 Very toxic to aquatic life with long lasting effects.
Precautionary Statements	P264 Wash skin thoroughly after handling. P280 Wear eye protective/face protection. P305+P351 IF IN EYES: Rinse cautiously with water for several minutes. +P338 Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P391 Collect spillage. 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.

### Additional Labelling

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

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

May form combustible dust concentrations in the air.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Components**

<b>Chemical Name</b>	<b>CAS-No. EC-No. Index-No. Registration number</b>	<b>Classification</b>	<b>Concentration (% w/w)</b>
sodium 3,6-dichloro- o-anisate	1982-69-0 217-846-3 607-243-00-7	Acute Tox. 4; H332 Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 3; H412	>= 30 - < 50
nicosulfuron	111991-09-4	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100	>= 10 - < 20
prosulfuron (ISO)	94125-34-5  016-084-00-7	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100	>= 2.5 - < 10
sodium hydroxide	1310-73-2 215-185-5 011-002-00-6	Met. Corr. 1; H290 Skin Corr. 1A; H314 specific concentration limit Skin Corr. 1A; H314 >= 5 % Skin Corr. 1B; H314 >= 2 - < 5 % Skin Irrit. 2; H315 >= 0.5 - < 2 % Eye Irrit. 2; H319 >= 0.5 - < 2 %	>= 0.5 - < 1
<b>Substances with a workplace exposure limit :</b>			
kaolin	1332-58-7 296-473-8		>= 10 - < 20

For explanation of abbreviations 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 the Syngenta emergency number, a poison control centre or physician, or going for treatment.

**If inhaled:** 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.

**In case of skin contact:** Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

**In case of 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.

**If swallowed:** If swallowed, seek medical advice immediately and show this container or label. Do **NOT** induce vomiting.

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

**Symptoms:** Non-specific. No symptoms known or expected.

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

**Treatment:** There is no specific antidote available. Treat symptomatically.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

**Suitable extinguishing media:**

Extinguishing media - small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires: Use alcohol-resistant foam or water spray.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

### **5.2 Specific hazards arising from the substance or mixture**

**Specific hazards during firefighting:** As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

### **5.3 Advice for firefighters**

**Special protective equipment for firefighters:** Wear full protective clothing and self-contained breathing apparatus.

Further information: Do not allow run-off from fire fighting 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:** Refer to protective measures listed in sections 7 and 8.

### **6.2 Environmental precautions**

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not flush into

surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

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

**Methods for 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). Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water.

### **6.4 Reference to other sections**

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

## **SECTION 7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

**Advice on safe handling:** This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. This material can become readily charged in most operations. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

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

**Requirements for storage areas and containers:** 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 feedingstuffs.

### **7.3 Specific end use(s)**

**Specific use(s):** 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**

#### **Occupational Exposure Limits**

<b>Components</b>	<b>CAS-No.</b>	<b>Value type (Form of exposure)</b>	<b>Control parameters</b>	<b>Basis</b>
kaolin	1332-58-7	TWA (Respirable dust)	2 mg/m <sup>3</sup>	GB EH40
		TWA (Respirable dust)	0.1 mg/m <sup>3</sup>	2004/37/EC
Further information: Indicative				
nicosulfuron	111991-09-4	TWA	5 mg/m <sup>3</sup> (Respirable dust)	Supplier

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
prosulfuron (ISO)	94125-34-5	TWA	4 mg/m <sup>3</sup>	Syngenta
sodium hydroxide	1310-73-2	STEL	2 mg/m <sup>3</sup>	GB EH40

### Derived No Effect Level (DNEL)

Substance name	End Use	Exposure routes	Potential health effects	Value
sodium hydroxide	Workers	Inhalation	Long-term local effects	1 mg/m <sup>3</sup>
	Consumers	Inhalation	Acute systemic effects	1 mg/m <sup>3</sup>

## 8.2 Exposure controls

### Engineering measures

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

### Personal protective equipment

Eye/face protection: Tightly fitting safety goggles. Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Hand protection

Remarks: No special protective equipment required.

Skin and body protection: No special protective equipment required. Select skin and body protection based on the physical job requirements.

Respiratory protection: No personal respiratory protective equipment normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

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.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance: granules

Colour: light brown

Odour: No data available

Odour Threshold: No data available

pH: 6 - 10, Concentration: 1 %w/v

Melting point/range: No data available  
Boiling point/boiling range: No data available  
Flash point: No data available  
Evaporation rate: No data available  
Flammability (solid, gas): May form combustible dust concentrations in air.  
Burning number: 2 (20 °C); 3 (100 °C)  
Upper explosion limit / Upper flammability limit: No data available  
Lower explosion limit / Lower flammability limit: No data available  
Vapour pressure: No data available  
Relative vapour density: No data available  
Density: No data available  
Bulk density: 0.57 g/cm<sup>3</sup>  
Water solubility: No data available  
Solubility in other solvents: No data available  
Partition coefficient: n-octanol/water: No data available  
Auto-ignition temperature: No data available  
Decomposition temperature: No data available  
Viscosity, dynamic: No data available  
Viscosity, kinematic: No data available  
Explosive properties: Not explosive  
Oxidizing properties: The substance or mixture is not classified as oxidizing

**9.2 Other Information**  
Minimum ignition temperature: 500 °C  
Minimum ignition energy: > 1,000 mJ  
Particle size: No data available

## **SECTION 10. STABILITY AND REACTIVITY**

### **10.1 Reactivity**

None reasonably foreseeable.

### **10.2 Chemical stability**

Stable under normal conditions

### **10.3 Possibility of hazardous reactions**

Hazardous reactions: No dangerous reaction known under conditions of normal use.

### **10.4 Conditions to avoid**

Conditions to avoid : No decomposition if used as directed.

### **10.5 Incompatible materials**

Materials to avoid : None known

## 10.6 Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products are known.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Information on likely routes of exposure: Ingestion, Inhalation, Skin contact, Eye contact

#### Acute toxicity

##### Product:

- Acute oral toxicity: LD50 (Rat, female): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity
- Acute inhalation toxicity: Acute toxicity estimate: > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Calculation method
- Acute dermal toxicity: LD50 (Rat, male and female): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

##### Components:

#### **sodium 3,6-dichloro-o-anisate:**

- Acute oral toxicity: LD50 (Rat, male and female): 4,600 mg/kg
- Acute inhalation toxicity: LC50 (Rat, male): 4.46 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Remarks: Based on data from similar materials
- Acute dermal toxicity: LD50 (Rat, male and female): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on data from similar materials

#### **nicosulfuron:**

- Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg
- Acute inhalation toxicity: LC50 (Rat): > 5.47 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity: LD50 (Rat): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

#### **prosulfuron (ISO):**

- Acute oral toxicity: LD50 (Rat, male and female): 986 mg/kg
- Acute inhalation toxicity: LC50 (Rat, male and female): > 5,400 mg/m<sup>3</sup>  
Exposure time: 4 h

Test atmosphere: dust/mist  
Acute dermal toxicity: LD50 (Rabbit, male and female): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

### **Skin corrosion/irritation**

#### **Product:**

Species: Rabbit  
Result: No skin irritation

#### **Components:**

##### **sodium 3,6-dichloro-o-anisate:**

Species: Rabbit  
Result: No skin irritation  
Remarks: Based on data from similar materials

##### **nicosulfuron:**

Result: No skin irritation

##### **prosulfuron (ISO):**

Species: Rabbit  
Result: No skin irritation

##### **sodium hydroxide:**

Result: Corrosive

### **Serious eye damage/eye irritation**

#### **Product:**

Species: Rabbit  
Result: Irritation to eyes, reversing within 21 days

#### **Components:**

##### **sodium 3,6-dichloro-o-anisate:**

Species: Rabbit  
Result: Eye irritation

##### **nicosulfuron:**

Result: No eye irritation

##### **prosulfuron (ISO):**

Species: Rabbit  
Result: No eye irritation

##### **sodium hydroxide:**

Result: Corrosive

### **Respiratory or skin sensitisation**

#### **Product:**

Test Type: Local lymph node assay (LLNA)  
Species: Mouse



Result: Did not cause sensitisation on laboratory animals.

**Components:**

**sodium 3,6-dichloro-o-anisate:**

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

**nicosulfuron:**

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

**prosulfuron (ISO):**

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

**Germ cell mutagenicity**

**Components:**

**sodium 3,6-dichloro-o-anisate:**

Germ cell mutagenicity- Assessment: Animal testing did not show any mutagenic effects.

Remarks: Information given is based on data obtained from similar substances.

**nicosulfuron:**

Germ cell mutagenicity- Assessment: Animal testing did not show any mutagenic effects.

**prosulfuron (ISO):**

Germ cell mutagenicity- Assessment: Animal testing did not show any mutagenic effects.

**Carcinogenicity**

**Components:**

**sodium 3,6-dichloro-o-anisate:**

Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

Remarks: Information given is based on data obtained from similar substances.

**nicosulfuron:**

Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

**prosulfuron (ISO):**

Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

kaolin:

Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

**Reproductive toxicity**

**Components:**

**sodium 3,6-dichloro-o-anisate:**

Reproductive toxicity - Assessment: No toxicity to reproduction

Remarks: Information given is based on data obtained from similar substances.

**nicosulfuron:**

Reproductive toxicity - Assessment: No toxicity to reproduction

**prosulfuron (ISO):**

Reproductive toxicity - Assessment: No toxicity to reproduction

**STOT - repeated exposure****Components:****sodium 3,6-dichloro-o-anisate:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Remarks: Information given is based on data obtained from similar sub-stances.

**Repeated dose toxicity****Components:****prosulfuron (ISO):**

Remarks: No adverse effect has been observed in chronic toxicity tests.

**SECTION 12. ECOLOGICAL INFORMATION****12.1 Toxicity****Product:**

Toxicity to algae/aquatic plants: ErC50 (*Raphidocelis subcapitata* (freshwater green alga)): 0.73 mg/l  
Exposure time: 72 h  
ErC50 (*Lemna gibba* (gibbous duckweed)): 0.017 mg/l  
Exposure time: 7 d  
NOEC (*Raphidocelis subcapitata* (freshwater green alga)): 0.046 mg/l  
End point: Growth rate  
Exposure time: 72 h  
NOEC (*Lemna gibba* (gibbous duckweed)): 0.006 mg/l  
End point: Growth rate  
Exposure time: 7 d  
EC10 (*Raphidocelis subcapitata* (freshwater green alga)): 0.34 mg/l  
End point: Growth rate  
Exposure time: 72 h  
EC10 (*Lemna gibba* (gibbous duckweed)): 0.0051 mg/l  
End point: Growth rate  
Exposure time: 7 d

**Components:****sodium 3,6-dichloro-o-anisate:**

Toxicity to fish: LC50 (*Oncorhynchus mykiss* (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Remarks: Information given is based on data obtained from similar substances.

Toxicity to algae/aquatic plants:	EC50 ( <i>Skeletonema costatum</i> (marine diatom)): 0.58 mg/l Exposure time: 120 h Remarks: Information given is based on data obtained from similar substances.
	NOEC ( <i>Skeletonema costatum</i> (marine diatom)): 0.011 mg/l Exposure time: 120 h Remarks: Information given is based on data obtained from similar substances.
Ecotoxicology Assessment	
Acute aquatic toxicity:	Very toxic to aquatic life.
<b>nicosulfuron:</b>	
Toxicity to fish:	LC50 ( <i>Oncorhynchus mykiss</i> (rainbow trout)): 65.7 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates:	EC50 ( <i>Daphnia magna</i> (Water flea)): 90 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants:	ErC50 ( <i>Lemna gibba</i> (gibbous duckweed)): 0.0017 mg/l Exposure time: 7 d
M-Factor (Acute aquatic toxicity):	100
Toxicity to fish (Chronic toxicity):	NOEC: 10 mg/l Exposure time: 28 d Species: <i>Oncorhynchus mykiss</i> (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):	NOEC: 5.2 mg/l Exposure time: 21 d Species: <i>Daphnia magna</i> (Water flea)
M-Factor (Chronic aquatic toxicity):	100
Ecotoxicology Assessment	
Acute aquatic toxicity:	Very toxic to aquatic life.
Chronic aquatic toxicity:	Very toxic to aquatic life with long lasting effects.
<b>prosulfuron (ISO):</b>	
Toxicity to fish:	LC50 ( <i>Oncorhynchus mykiss</i> (rainbow trout)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates:	EC50 ( <i>Daphnia magna</i> (Water flea)): > 120 mg/l Exposure time: 48 h

Toxicity to algae/aquatic plants:	ErC50 ( <i>Raphidocelis subcapitata</i> (freshwater green alga)): 0.074 mg/l Exposure time: 72 h NOEC ( <i>Raphidocelis subcapitata</i> (freshwater green alga)): 0.008 mg/l End point: Growth rate Exposure time: 72 h EC50 ( <i>Lemna gibba</i> (gibbous duckweed)): 0.00126 mg/l Exposure time: 14 d NOEC ( <i>Lemna gibba</i> (gibbous duckweed)): 0.00083 mg/l Exposure time: 14 d
M-Factor (Acute aquatic toxicity):	100
Toxicity to microorganisms:	EC50 (activated sludge): > 100 mg/l Exposure time: 3 h
Toxicity to fish (Chronic toxicity):	NOEC: 5.8 mg/l Exposure time: 21 d Species: <i>Oncorhynchus mykiss</i> (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):	NOEC: 32 mg/l Exposure time: 21 d Species: <i>Daphnia magna</i> (Water flea)
M-Factor (Chronic aquatic toxicity):	100

## 12.2 Persistence and degradability

### Components:

#### **sodium 3,6-dichloro-o-anisate:**

Biodegradability: Result: Not readily biodegradable.

Remarks: Information given is based on data obtained from similar substances.

Stability in water: Degradation half life: 35 - 46 d

Remarks: Product is not persistent.

Based on data from similar materials

#### **nicosulfuron:**

Biodegradability: Result: Not readily biodegradable.

#### **prosulfuron (ISO):**

Biodegradability: Result: Not readily biodegradable.

Stability in water: Degradation half life: 45 - 60 d

Remarks: Product is not persistent.

### 12.3 Bioaccumulative potential

#### Components:

##### **sodium 3,6-dichloro-o-anisate:**

Bioaccumulation: Remarks: Low bioaccumulation potential. Based on data from similar materials

##### **nicosulfuron:**

Bioaccumulation: Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water: log Pow: 0.61

##### **prosulfuron (ISO):**

Bioaccumulation: Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water: log Pow: -0.76 (25 °C), pH: 9.0

log Pow: -0.21 (25 °C), pH: 6.9

log Pow: 1.5 (25 °C), pH: 5.0

### 12.4 Mobility in soil

#### Components:

##### **sodium 3,6-dichloro-o-anisate:**

Distribution among environmental compartments: Remarks: Very highly mobile in soil. Based on data from similar materials

Stability in soil: Dissipation time: 1.4 - 11 d

Percentage dissipation: 50 %

Remarks: Product is not persistent., Based on data from similar materials

##### **nicosulfuron:**

Distribution among environmental compartments: Remarks: Very highly mobile in soil.

Stability in soil: Dissipation time: 16.4 h

Percentage dissipation: 50% (DT50)

##### **prosulfuron (ISO):**

Distribution among environmental compartments: Remarks: Highly mobile in soils

Stability in soil: Dissipation time: 11 d

Percentage dissipation: 50 % (DT50)

Remarks: Product is not persistent.

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Components:

##### **sodium 3,6-dichloro-o-anisate:**

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**nicosulfuron:**

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**prosulfuron (ISO):**

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**12.6 Other adverse effects****Product:**

Endocrine disrupting potential: 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 13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

**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 to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION****14.1 UN number**

ADR	RID	IMDG	IATA
UN 3077	UN 3077	UN 3077	UN 3077

**14.2 UN proper shipping name**

**ADR :** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PROSULFURON, NICOSULFURON)

**RID :** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PROSULFURON, NICOSULFURON)

**IMDG:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PROSULFURON, NICOSULFURON)

**IATA :** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PROSULFURON, NICOSULFURON)

**14.3 Transport hazard class(es)**

ADR	RID	IMDG	IATA
9	9	9	9

#### **14.4 Packing group**

##### **ADR**

Packing group : III

Classification Code : M7

Hazard Identification Number : 90

Labels : 9

Tunnel restriction code : (-)

##### **RID**

Packing group : III

Classification Code : M7

Hazard Identification Number : 90

Labels : 9

##### **IMDG**

Packing group : III

Labels : 9

EmS Code : F-A, S-F

##### **IATA (Cargo)**

Packing instruction (cargo aircraft): 956

Packing instruction (LQ): Y956

Packing group: III

Labels: Miscellaneous

##### **IATA (Passenger)**

Packing instruction (passenger aircraft): 956

Packing instruction (LQ): Y956

Packing group: III

Labels: Class 9 - Miscellaneous

#### **14.5 Environmental hazards**

##### **ADR**

Environmentally hazardous : yes

##### **RID**

Environmentally hazardous : yes

##### **IMDG**

Marine pollutant : yes

##### **IATA (Passenger)**

Environmentally hazardous: yes

##### **IATA (Cargo)**

Environmentally hazardous: yes

#### **14.6 Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

### **SECTION 15. REGULATORY INFORMATION**

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17): Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable

UK REACH List of substances subject to authorisation (Annex XIV): Not applicable

GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation: Not applicable

Control of Major Accident Hazards Regulations 2015 (COMAH) E1 ENVIRONMENTAL HAZARDS

#### **15.2 Chemical Safety Assessment**

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

### **SECTION 16. OTHER INFORMATION**

#### **Full text of H-Statements**

H290: May be corrosive to metals.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

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.

#### **Full text of other abbreviations**

Acute Tox.: Acute toxicity

Aquatic Acute: Acute aquatic toxicity

Aquatic Chronic: Chronic aquatic toxicity

Eye Irrit.: Eye irritation

Met. Corr.: Corrosive to metals

Skin Corr.: Skin corrosion

2004/37/EC: Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work



GB EH40: UK. EH40 WEL - Workplace Exposure Limits

2004/37/EC / TWA: Long term exposure limit

GB EH40 / TWA: Long-term exposure limit (8-hour TWA reference period)

GB EH40 / STEL: Short-term exposure limit (15-minute reference period)

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; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECS - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

##### **Classification of the mixture:**

Eye Irrit. 2	H319
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

##### **Classification procedure:**

Based on product data or assessment
Based on product data or assessment
Based on product data or assessment

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.



**SPANDIS®**

A water dispersible granule containing 40 g/kg prosulfuron, 400 g/kg dicamba and 100 g/kg nicosulfuron.

**Warning**

**Causes serious eye irritation.**

**Very toxic to aquatic life with long lasting effects.**

Wash skin thoroughly after handling.

Wear eye protective/face protection.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Collect spillage.

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.

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



**MAPP 19276 UFI: QRT2-M036-V00M-34DJ**

**IMPORTANT INFORMATION**

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crop	Maximum individual dose (kg product/ha)	Maximum number of applications	Latest time of application
Grain Maize, Forage Maize	0.4	1 per crop	Up to and including 8 true leaves (GS18)

**Other Specific Restrictions:** To avoid the build up of resistance do not apply this or any other product containing an ALS inhibitor herbicide with claims for control of grass-weeds more than once to any crop. The earliest time of application is 01 June.

Use shall be limited to one application every three years on the same field at a maximum dose of 20g active substance (prosulfuron) per hectare.

Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

