

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixture  
Product name : SEDUCE  
Type of formulation : Water soluble granules (SG)

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

#### 1.2.1. Relevant identified uses

Main use category : Plant protection product for professional use. Agriculture.  
Use of the substance/mixture : Herbicide.

#### 1.2.2. Uses advised against

No additional information available

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

#### Supplier:

Du Pont (UK) Limited  
Wedgwood Way  
Stevenage, Herts. SG1 4QN  
United Kingdom  
Tel : +44 (0) 1438 734 000  
E-mail: [sds-support@che.dupont.com](mailto:sds-support@che.dupont.com)

#### Distributor:

CERTIS UK  
Suite 5, 3 Riverside  
Granta Park  
Great Abington  
Cambridgeshire CB21 6AD  
United Kingdom  
Tel: +44 (0)845 373 0305  
Fax: +44 (0)1223 891210  
Email: [certis@certiseurope.co.uk](mailto:certis@certiseurope.co.uk)  
Website: [www.certiseurope.co.uk](http://www.certiseurope.co.uk)

### 1.4. Emergency telephone number

Emergency number : Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777.  
For advice on medical emergencies, fires, spillages or chemical hazards only –phone: 0870 190 6777.  
For further advice for medical professionals - The National Poisons Information Service:  
Tel: 0870 600 6266 (UK only) or Dublin Tel: 0035 3 137 99 64/379966.  
For further advice for veterinary surgeons: 020 7635 9195.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Full text of H-phrases: see section 16.

### 2.2. Label elements

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

Hazard pictograms (CLP)



GHS09

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P273 - Avoid release to the environment.  
 P391 - Collect spillage.  
 P501 - Dispose of contents/container to a suitable disposal site in accordance with local and national regulations.

EUH phrases

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

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable.

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Thifensulfuron methyl	(CAS No) 79277-27-3	25 - 50	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodium carbonate	(CAS No) 497-19-8 (EC no) 207-838-8 (REACH-no) 01-2119485498-19	10 - 20	Eye Irrit. 2, H319
Tribenuron methyl	(CAS No) 101200-48-0 (EC no) 401-190-1	10 - 25	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Trisodium phosphate dodecahydrate	(CAS No) 10101-89-0 (REACH-no) 01-2119489800-32	1 - 10	Skin Corr. 1A, H314 Eye Dam. 1, H318

Full text of H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : In the event of any complaints or symptoms, avoid further exposure.
- First-aid measures after inhalation : IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist call a doctor.
- First-aid measures after skin contact : IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and shoes.  
If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor. Never give anything by mouth to an unconscious person.

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

- Symptoms/injuries : No information available.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray  
Dry chemical powder  
Alcohol resistant foam  
Carbon dioxide (CO<sub>2</sub>).
- Unsuitable extinguishing media : Jet of water.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustion or thermal decomposition may generate toxic vapours: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.

### 5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire.  
Fight fire from safe distance and protected location.  
Do not breathe fumes  
Cool closed containers exposed to fire with water spray  
If possible, take the containers out of dangerous zone.  
Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers or streams.
- Protection during firefighting : Wear suitable protective clothing, gloves, eye/face protection and respiratory protection  
Wear a self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- Protective equipment : Wear suitable protective clothing, gloves and eye or face protection.

Emergency procedures : Evacuate area.

Ensure adequate ventilation.

Avoid direct contact with the substance.

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.  
Notify the authorities if product enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.

Once absorbed collect spilled material with shovels, buckets and place in closed containers and label properly.

Remove as chemical waste, according to national or local legislation.

In the event of major spillage: contact an expert.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Read label before use.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin, nose and mouth.

Wear suitable protective clothing, gloves and eye/face protection.

Opened containers must be carefully closed and kept upright to avoid leakage.

Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Contaminated work clothing should not be allowed out of the workplace.

Do not eat, drink or smoke when using this product.

Wash contaminated clothing before reuse.

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

Technical measures : Provide adequate ventilation.

Storage conditions : Prevent unauthorised access.

Keep locked up and out of the reach of children.

Keep in original containers, tightly closed.

Keep away from food, drink and animal feedingstuffs.

Protect against frost.

Keep away from heat and direct sunlight.

Do not allow product to become wet during storage.

Storage temperature : <35 °C

### 7.3. Specific end use(s)

Herbicide for agricultural use. Refer to the label.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available.

### 8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Ensure adequate ventilation, especially in confined areas.

Eye protection : Safety goggles or a face shield. (EN 166)

Hand protection : Wear impervious gloves resistant to chemical. Nitrile rubber. (EN 374)

Glove thickness: 0.3 mm

Protection index: Class 6

Wearing time: >480 min

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.

Gloves must be inspected prior to use. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Gauntlets shorter than 35 cm long shall be worn under the combination sleeve. Before removing gloves clean them with soap and water.

Skin and body protection : Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots.

Full protective clothing Type 5 (EN 13982-2)

When exceptional circumstances require an access to the treated area before the end of re-entry periods, wear full protective clothing Type 6 (EN 13034), nitrile rubber gloves class 3 (EN 374) and nitrile rubber boots (EN 13832-3 / EN ISO 20345).

To optimize the ergonomics it may be recommended to use cotton underwear when wearing some fabrics.

Mixer and loaders: Full protective clothing Type 5 + 6 (EN ISO 13982-2/ EN 13034)  
Rubber apron Nitrile rubber boots (EN 13832-3 / EN ISO 20345).

Spray application - outdoor: Tractor / sprayer with hood: No personal body protection normally required.

Tractor / sprayer without hood: Low application (horticulture, field crops): Full protective clothing Type 6 (EN 13034) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).

Backpack / knapsack sprayer: Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).

Mechanical automatized spray application in closed tunnel: No personal body protection normally required.

Respiratory protection : Wear appropriate respirator for dust / organic vapors. Half mask with a particle filter FFP1 (EN149).

Spray application - outdoor: Tractor / sprayer with hood: No personal respiratory protective equipment normally required.

Tractor / sprayer without hood: Low application (horticulture, field crops): Half mask with a particle filter FFP1 (EN149).

Backpack / knapsack sprayer: Low application (horticulture, field crops): Half mask with a particle filter P1 (EN 143).

Hygiene measures : Do not eat, drink or smoke while handling the product.  
 Clean gloves with soap and water before removing.  
 Wash hands and face with soap and water before eating, drinking or smoking.  
 Clean equipment, premises and work clothes regularly.  
 Work clothing should remain on the work area and stored separately from street clothes.

Environmental exposure controls : Discharge into the environment must be avoided.  
 Do not contaminate surface and groundwater.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granules.
Colour	: Light brown.
Odour	: Slight.
Odour threshold	: Not applicable.
pH	: 9.1 10 g/l ( 20 °C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: Not applicable.
Flash point	: Not applicable.
Auto-ignition temperature	: 385 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 692 kg/m <sup>3</sup>
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No explosive properties.
Oxidising properties	: No oxidising properties.

Explosive limits : No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

The product is stable at normal handling and storage conditions.

**10.2. Chemical stability**

The product is stable at normal handling and storage conditions.

**10.3. Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

Polymerization will not occur.

No decomposition if stored and applied as directed.

**10.4. Conditions to avoid**

Decomposes slowly on exposure to water.

To avoid thermal decomposition, do not overheat.

Under severe dusting conditions, this material may form explosive mixtures in air.

**10.5. Incompatible materials**

No additional information available.

**10.6. Hazardous decomposition products**

Sulphur oxides.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Acute toxicity : Not classified

SEDUCE	
LD50 oral rat	> 5000 mg/kg

Thifensulfuron methyl (79277-27-3)	
LC50 / 4h rat	> 7.9 mg/kg

Tribenuron methyl (101200-48-0)	
LC50 / 4h rat	> 6.0 mg/kg

Irritation : No skin irritation (rabbit)  
 No eye irritation (rabbit)

Corrosivity : Not classified

Sensitisation : Animal test did not cause sensitization by skin contact. (guinea pig)

Repeated dose toxicity : Not classified

Carcinogenicity : Thifensulfuron methyl. Animal testing did not show any carcinogenic effects.  
Tribenuron methyl. Not classifiable as a human carcinogen.  
 An increased incidence of tumours was observed in laboratory animals. Target(s): Mammary glands.

Mutagenicity : Thifensulfuron methyl. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.  
Tribenuron methyl. Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Toxicity for reproduction : Thifensulfuron methyl. No toxicity to reproduction.  
Tribenuron methyl. No toxicity to reproduction.

Assessment teratogenicity : Thifensulfuron methyl. Did not show teratogenic effects in animal experiments. Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

## SECTION 12: Ecological information

### 12.1. Toxicity

SEDUCE	
LC50 Fishes ( <i>Oncorhynchus mykiss</i> )	> 130 mg/l (96h)
EC50 Daphnia ( <i>Daphnia magna</i> )	> 130 mg/l (48 h)
EC50 other aquatic organisms ( <i>Lemna gibba</i> )	0,029 mg/l (14 d)

### 12.2. Persistence and degradability

SEDUCE	
Persistence and degradability	Not readily biodegradable.

### 12.3. Bioaccumulative potential

SEDUCE	
Bioaccumulative potential	not bioaccumulable.

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulative (vPvB).

### 12.6. Other adverse effects

No additional information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. : 3077

### 14.2. UN proper shipping name

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl, Tribenuron methyl)

Transport document description : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl, Tribenuron methyl), 9, III, (E)



**14.3. Transport hazard class(es)**

Class (UN) : 9

**14.4. Packing group**

Packing group (UN) : III

**14.5. Environmental hazards**

Dangerous for the environment :

Marine pollutant



Other information : No supplementary information available.

**14.6. Special precautions for user**

**14.6.1. Overland transport**

Tunnel restriction code : E

**14.6.2. Transport by sea**

No additional information available

**14.6.3. Air transport**

No additional information available

**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**

**15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

Contains no REACH candidate substance

**15.1.2. National regulations**

No additional information available

**15.2. Chemical safety assessment**

No additional information available

**SECTION 16: Other information**

Full text of H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2

Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Sens. 1	Sensitisation — Skin, category 1
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects