



This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

## Section 1. Identification of the mixture and of the company

### 1.1 Product identifier

Trade name : **SIRFLOR granular**

Slow release nitrogen fertilizer, based on methylene-urea.

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

Identified uses: slow release nitrogen fertilizer.

Uses advised against: not to be used for any purpose other than those identified.

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

Manufacturer/Supplier : **SAVIOLIFE S.r.l.**  
Street address : Viale Lombardia, 29  
Postcode/Place/Country ID : 46019 Viadana (MN) - ITALY  
Telephone number : +39 375 - 7871  
Fax number : +39 375 - 787200  
E-mail address of competent person responsible for the SDS : [infosds@sadepan.com](mailto:infosds@sadepan.com)

### 1.4 Emergency telephone number

Country	Emergency telephone number
France	+ 33 (0)1 45 42 59 59 - ORFILA (INRS): - 24 heures sur 24 et 7 jours sur 7
Belgique	+32 070 245 245 - Centre antipoisons belge.
Grand-Duché de Luxembourg	8002 5500 - Centre antipoisons belge
Germany	+49 (0)228 19240 - Informationszentrale gegen Vergiftungen Zentrum für Kinderheilkunde - 24 Stunden am Tag.
England or Wales	0845 46 47 (UK only) - National Poison Information Service
Scotland	08454 24 24 24 (UK only) - National Poison Information Service
<b>Saviolife</b>	+39 0375 – 787.1 only available during office hours

## Section 2. Hazards Identification

### 2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

Not dangerous mixture.



### 2.1.2 Additional information

None.

### 2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements:

Hazard pictograms: unnecessary.

Signal word: unnecessary.

Hazard statements: none.

Precautionary statements: none.

### 2.3 Other hazards

The substances contained in SIRFLOR granular don't meet the criteria as PBT (not PBT) and vPvB criteria (not vPvB according to Annex XIII of Regulation (EC) No. 1907/2006).

## Section 3. Composition/ Information on ingredients

3.1 Substance: N.A.

3.2 Mixture:

SIRFLOR granular is a mixture ad contains:

Identification name	CAS number	Registration number	Classification 1272/2008 EC	Conc. % weight
Polymer UF (methylene-urea)	9011-05-6	exempted	not dangerous	88 ÷ 95
Urea	57-13-6	01-2119463277-33-XXXX	not dangerous	0,5 ÷ 10

## Section 4. First-aid measures

### 4.1 Description of first aid measures

General notes: remove contaminated clothing.  
In case the injured person may lose consciousness, place him in recovery position and move him away from the accident place. Rescuers should pay attention to their own safety.

Eyes contact: remove any contact lenses. Rinse with running water affected eyes holding the eyelids open; if necessary, require ophthalmologist assistance.

Skin contact: remove contaminated clothing; wash skin exposed to contact with flushing water.



Swallowing	immediately rinse the mouth with water; if swallowing has occurred, drink plenty of water and induce vomiting. Require medical assistance, if necessary.
Inhalation	remove the victim affected by the inhalation from the polluted area and keep him into fresh air. Require medical assistance, if necessary.
Treatment:	there are no specific treatments.

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

Eye contact:	there are no harmful effects known.
Skin contact:	there are no harmful effects known.
Ingestion:	there are no harmful effects known.
Inhalation:	there are no harmful effects known.

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

See Section 4.1

### Section 5. Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media: the product is non-flammable and non-combustible. Fires involving the product can be extinguished using vaporized water, foam, carbon dioxide or powder extinguishers; if circumstances allow, avoid the use of water to prevent damage and leakage of product.

Unsuitable extinguishing media: none.

#### 5.2 Special hazards arising from the mixture

The product is non-flammable and non-combustible.  
When involved in a fire and heated, the product may decompose and emit toxic fumes of nitrogen oxides, carbon monoxide and dioxide and ammonia.  
Don't breathe fumes.

#### 5.3 Advice for firefighters

Move away containers next to the fire; if this is not possible, wipe them with water. The personnel involved must use full-face masks or self-contained breathing apparatus and wear appropriate clothing. The water used to extinguish the fire, if contaminated by the product, must be brought to suitable treatment plants.

### Section 6. Accidental release measures

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

##### 6.1.1 For non-emergency personnel

Emergency procedures:

In the case of leaking, people not involved in the emergency should be lifted out of the area



concerned.

Protective equipment:

If immediate action is necessary, follow directions and instructions of the staff.

6.1.2 For emergency responders

Ventilate the area where the spill occurred if confined, extinguishing eventual open flames and isolating ignition sources especially if SIRFLOR granular is in powder form.

Prevent contact with skin and eyes by using appropriate clothing. Respiratory protection (See Section 8.2.2).

6.2 Environmental precautions

Prevent the product from entering drains and surface waters.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment:

Contain spill with physical barriers.

6.3.2 For cleaning up:

In case of spillage, collect the dispersed material by avoiding raising the dust.

6.3.3 Other information:

Water may be used only after removing all solid and cleaned out the concerned area.

6.4 Reference to other sections

See Section 13 for waste treatment methods.

## **Section 7. Handling and Storage**

7.1 Precautions for safe handling

Ensure good ventilation of the areas of storage and handling.

Loading, unloading and handling operations must be done by skilled staff; possibly adopt a closed-loop system. To minimize occupational exposure may be helpful the use of respiratory protective equipment, clothes, glasses, rubber gloves or barrier cream (see Section 8.2.2).

If spillage occurs, thoroughly air out the contaminated area and confine with physical barriers (see Section 6).

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

7.2 Conditions for safe storage, including any incompatibilities

SIRFLOR granular does not have any storage problems: in their original packages and in dry locations at moderate temperature, the product can be conserved without any alteration of their properties for at least 3 years. For an optimal conservation, the temperature should be kept below 30 °C.

7.3 Specific end use(s): N.A.

## **Section 8. Exposure controls / Personal protection**

8.1 Control parameters

The product doesn't contain hazardous substances but pay attention to dust coming during handling.



The recommended occupational exposure limits are the followings (ACGIH 2017):

DUST	TLV TWA Particle inhalable	10	mg/m <sup>3</sup>
	TLV TWA Particle respirable	3	mg/m <sup>3</sup>

Information on monitoring procedures

N.A.

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

SIRFLOR granular is a solid product and may be in granules or in powder form and must be handled with care. The dust that are released during handling and any emission must be directed into appropriate systems to capture and breakdown.

The storage and handling areas should be well ventilated; provide adequate localized aspirations at points of possible emission of dusts.

### 8.2.2 Personal protection measures, such as personal protective equipment

- Respiratory protection

The use of means for respiratory protection is required if the technical measures implemented are not sufficient to limit worker exposure to threshold values considered. The protection provided by masks is in any case limited.

If the dust concentration in the environment exceeds the TLV, wear half or full face masks with filters for dust (type FFP2 = white colour) in compliance with EN 149:2001+A1 2009 norm.

- Hand protection:

Protective gloves resistant to chemical substances in compliance with EN 374 standard.

Materials suitable also for a prolonged and direct contact (recommendation: protection index 5, corresponding to > 240 minutes of breakthrough time according to EN 374 norm).

Follow the instructions of the gloves manufacturer regarding the time of use.

- Eye protection:

Provide eyes protection with splash-proof goggles or face shield in compliance with EN 166 norm. Avoid contact lenses.

- Body protection:

Wear suitable protective clothing, preferably cotton, for complete skin protection and safety shoes (eg. according to EN 14605).

- General protection and hygiene measures:

Do not smoke, eat or drink in the working places. Remove contaminated clothing.

Have eye wash bottle or eye rinse ready to use and a shower at work place.

Wash hands before eating or drinking

### 8.2.3 Environmental exposure controls

Sazolene is classified non Environmentally Hazardous. However, it must provide that manipulation occurs in confined areas protected by containment against spills and local exhaust ventilation conveyed to suitable abatement systems.

**Section 9. Physical and Chemical Properties**

## 9.1 Information on basic physical and chemical properties

Appearance	: solid granules
Odour	: odourless
Odour threshold	: N.A.
pH (10% water dispersion at 20°C)	: 4.0 ÷ 7.0
Melting point / freezing point	: N.A.
Boiling point	: not applicable: solid substance
Flash point (closed cup)	: not applicable: solid substance
Evaporation rate	: not applicable: solid substance
Flammability (solid, gas)	: not flammable
Upper/lower flammability or explosive limits	: LEL 560 g/m <sup>3</sup> ; particles < 105 µm
Vapour pressure	: N.A.
Vapour density	: N.A.
Relative density	: 0.70 ÷ 0.85 kg/dm <sup>3</sup>
Solubilities	: partially soluble in water
Partition coefficient: n-octanol/water (Log K <sub>ow</sub> ):	: N.A. - mixture
Auto-ignition temperature	: 560 °C
Decomposition temperature;	: decomposes at temperatures greater than 250 °C
Viscosity	: not applicable: solid substance
Explosive properties	: not explosive
Oxidising properties	: non-oxidizing

## 9.2 Other information

The material doesn't present pyrophoric properties and does not release flammable gas on contact with water.

**Section 10. Stability and Reactivity**

## 10.1 Reactivity

N.A.

## 10.2 Chemical stability

SIRFLOR granular is stable if handled and stored according to good working practice (see Sections 7.1, 7.2).

## 10.3 Possibility of hazardous reactions

No hazardous reactions.

#### 10.4 Conditions to avoid

Avoid exposure to heat sources.

#### 10.5 Incompatible materials

No one in particular

#### 10.6 Hazardous decomposition products

SIRFLOR granular does not decompose when used for intended uses.

### Section 11. Toxicological information

Toxicological information for the product is not available.

The following are the toxicological information of main components of the mixture.

#### 11.1 Information on toxicological effects

- Polymer UF (methylen urea):

According to available information, the polymer is classified NOT HAZARDOUS.

- Urea:

According to available information, Urea is classified NOT HAZARDOUS

### Section 12. Ecological information

SIRFLOR granular is a slow release nitrogen fertilizer, use according to good working practices, avoiding release of the product in water courses (see Sections 6, 7, 13, 14).

The ecological data for the product are not available.

The following are the ecological information on the main components of the mixture.

#### 12.1 Toxicity

Acute fish toxicity

Polymer UF (methylen urea)

the available data do not justify classification.

Urea

CL50 (96h) = > 10,000 mg/L, *Leuciscus idus*

Aquatic invertebrates toxicity:

Polymer UF (methylen urea)

the available data do not justify classification.

Urea

EC50 (48 h): > 10,000 mg/L *Daphnia magna*, data from literature.

Algae and aquatic plants toxicity:

Polymer UF (methylen urea)

the available data do not justify classification.

Urea

NOEC for freshwater algae = 47 mg/L

#### 12.2 Persistence and degradability



Polymer UF (methylen urea) SIRFLOR GRANULAR is gradually degrading when dispersed in the ground, releasing products which are metabolized by bacteria.  
Urea The substance is readily biodegradable (according to OECD criteria).

### 12.3 Bioaccumulative potential

Polymer UF (methylen urea) N.A.  
Urea The low value of Log Pow (-1,73 à 25 ° C) indicates the low bioaccumulative potential of Urea.

### 12.4 Mobility in soil

Polymer UF (methylen urea) N.A.  
Urea From literature data, the Log Kow values resulted from the various tests, suggest that Urea has from a moderate to a high soil mobility.

### 12.5 Results of PBT and vPvB assessment

Polymer UF (methylen urea) N.A.  
Urea Considering all available data on biotic and abiotic degradation, bioaccumulation and toxicity, we can state that the substance does not meet the PBT criteria (not PBT) and the criteria for vPvB (not vPvB).

### 12.6 Other adverse effects

Polymer UF (methylen urea) adverse effects on the environment are not known  
Urea adverse effects on the environment are not known

## Section 13. Disposal considerations

The disposal of SIRFLOR granular must occur by an authorized place and in compliance with the current laws.

However, SIRFLOR granular is a fertilizer and if it is not contaminated by hazardous substances, it can be recycled in other fertilizers.

## Section 14. Transport

SIRFLOR granular is not a dangerous good under transport regulations.

14.1 UN number: N.A.  
14.2 UN proper shipping name: N.A.  
14.3 Transport hazard class(es): N.A.  
14.4 Packing group: N.A.  
14.5 Environmental hazards: N.A.  
14.6 Special precautions for user: N.A.





- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: N.A.

## Section 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the mixture

Regulation n° 1907/2006/EC: REACH

Regulation n° 1272/2008/EC: Classification, packaging and labelling of dangerous substances and mixtures and subsequent amendments.

This is a non-exhaustive list.

### 15.2 Chemical safety assessment

Chemical safety assessment has not been carried out for this mixture.

## Section 16. Other Information

### 16.1 Indication of changes

This SDS is in review n° 1.

### 16.2 Key literature references and sources for data:

Registration Dossier Urea REACH, CSA and Consortium Urea 2016.

### 16.3 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP)

Classification procedure: calculation method.

### 16.4 Hazard statements (number and full text):

N.A.

### 16.5 Training advice:

N.A.

### 16.6 Further information:

N.A.

### 16.7 Abbreviations and acronyms:

**ACGIH:** American Conference of Governmental Industrial Hygienists

**ADN:** Accord européen relative au transport international des marchandises dangereuses par voies de navigation intérieures.

**ADR:** Accord européen relative au transport international des marchandises dangereuses par route.

**CLP:** Classification, Labelling and Packaging.



<b>CSR:</b>	Chemical Safety Report
<b>DNEL:</b>	Derived no effect level.
<b>EC 50</b>	Means the effective concentration of a substance that causes 50% of the maximum response after exposure for determined period of time.
<b>EC:</b>	European Community
<b>EU:</b>	European Union
<b>IARC:</b>	International Agency for Research on Cancer.
<b>IATA:</b>	International Air Transport Association.
<b>ICAO:</b>	International Civil Aviation Organization.
<b>IMDG:</b>	International Maritime Dangerous Goods code.
<b>LC 50:</b>	Lethal Concentration; the concentrations of the chemical in air that kills 50% of the test animals during the observation period.
<b>LD 50:</b>	Lethal Dose 50; the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
<b>N.A.</b>	Not available
<b>PBT:</b>	Persistent, bioaccumulative and toxic.
<b>PNEC:</b>	Predicted no effect concentration.
<b>RID:</b>	Règlement concernent le transport International ferroviaire des marchandises Dangereuses.
<b>STEL:</b>	Short term exposure limit.
<b>TLV:</b>	Threshold limit value.
<b>TWA:</b>	Time Weighted Average.
<b>vPvB:</b>	Very persistent very bioaccumulative.
[...]	References.

This safety data sheet was reviewed in all its sections in compliance with the Commission Regulation 830/2015/UE. This product must be stored, handled and used according to the hygiene and safety standards dictated by common industrial practice in conformity to current regulations. This information is based upon the present state of our knowledge. We are not responsible for the use of this information.