

# SAFETY DATA SHEET

## Urea, Granular 46-0-0

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

#### 1.1 Product identifier

**Product name** : Urea, Granular 46-0-0

**EC number** : 200-315-5

**REACH Registration number**

Registration number	Substance
01-2119463277-33-XXXX	Urea

**CAS number** : 57-13-6

**Product code** : 509-28040; 4379-28040

**Product description** : EC FERTILISER Straight Fertiliser Urea, Granulated 46-0-0

**Product type** : Granular solid.

**Other means of identification** : Not available.

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

Identified uses	
Fertiliser. Manufacture of chemicals. Manufacture of intermediates. Manufacture of personal care products. Manufacture of pharmaceutical products. Manufacture of resins. Manufacture of speciality fertilisers. Pollution control products.	
Uses advised against	Reason
Not applicable.	Non-hazardous substance.

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

Nutrien Europe SA  
Avenue Louise 326/36  
1050 Bruxelles  
Belgium  
Tel : +32 (0)2 646 70 00  
Fax : +32 (0)2 646 68 60  
commercial@nutrien.eu

**e-mail address of person responsible for this SDS** : productsafety@nutrien.com

#### 1.4 Emergency telephone number

##### National advisory body/Poison Centre

**Telephone number** : Nutrien Safety Data Sheets are available in many languages at <https://agproducts.nutrien.com/products/>  
Physicians, Poison Centres, or the Public may contact Nutrien's Global Emergency Response Number 24/7/365 for service in many languages at +1 303 389 1654

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BELARUS +375 17 287 00 92  
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## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

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FRANCE  
Angers +33 (0)2 41 48 21 21  
Bordeaux +33 (0)5 56 96 40 80  
Lille 0800 59 59 59 (national callers)  
Lyon +33 (0)4 72 11 69 11  
Marseille +33 (0)4 91 75 25 25  
Nancy +33 (0)3 83 22 50 50  
Paris +33 (0)1 40 05 48 48  
Rennes +33 (0)2 99 59 22 22  
Strasbourg +33 (0)3 88 37 37 37  
Toulouse +33 (0)5 61 77 74 47  
GEORGIA +995 99 53 33 20  
GERMANY  
Berlin +49 30 192 40  
Bonn +49 228 192 40  
Erfurt +49 361 730 730  
Freiburg +49 761 192 40  
Goettingen +49 551 192 40  
Homburg (Saar) +49 6841 192 40  
Mainz +49 6131 192 40  
Munich +49 89 192 40  
GREECE +30 21 07 79 37 77  
HUNGARY +36 80 20 11 99  
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IRELAND +353 1 837 9964 (medical professionals) +353 1 809 2166 (public)  
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ITALY  
Bergamo +39 800 883 300  
Firenze +39 55 794 7819  
Foggia +39 881 732 326  
Genoa +39 10 563 62 45  
Milan +39 02 6610 1029  
Padova +39 49 827 50 78  
Pavia +39 38 224 444  
Rome +39 06 305 43 43  
Turin +39 011 663 7637  
KAZAKHSTAN +7 3272 925 868  
LITHUANIA +370 5 236 20 52; +370 687 533 78  
NETHERLANDS +31 30 274 88 88  
NORWAY +47 22 59 13 00  
POLAND  
Gdansk +48 58 682 04 04  
Krakow +48 12 411 99 99  
Lodz +48 42 63 14 724  
Sosnowiec +48 32 266 11 45  
Warszawa +48 22 619 66 54  
Wroclaw +48 71 343 30 08  
PORTUGAL 808 250 143 (national callers)  
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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

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Birmingham 844 892 0111  
Edinburgh 844 892 0111  
Newcastle Upon Tyne +44 191 2606182; +44 191 2606180  
Penarth 844 892 0111

### Supplier

**Telephone number** : Nutrien Europe SA  
EMERGENCY TELEPHONE NUMBERS:  
Transportation: 00-1-303-389-1654  
Medical: 00-1-303-389-1654

**Hours of operation** : 24 / 7 / 365

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mono-constituent substance

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

The product is NOT classified as hazardous according to Regulation (EC) 1272/2008 as amended.

The product is NOT classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : No signal word.

**Hazard statements** : Not applicable.

#### Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Hazardous ingredients** : Not applicable.

**Supplemental label elements** : Safety data sheet available on request.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

#### Special packaging requirements

**Containers to be fitted with child-resistant fastenings** : Not applicable.

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## SECTION 2: Hazards identification

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII** : No.

**Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : No.

**Other hazards which do not result in classification** : Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

## SECTION 3: Composition/information on ingredients

**3.1 Substances** : Mono-constituent substance

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Urea	REACH #: 01-2119463277-33-XXXX EC: 200-315-5 CAS: 57-13-6	98	Not classified.  <b>See Section 16 for the full text of the H statements declared above.</b>	[A]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

#### Type

[A] Constituent

[B] Impurity

[C] Stabilising additive

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : No known significant effects or critical hazards. Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In a fire, hazardous decomposition products may be produced. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : No known effect after skin contact. Rinse with water for a few minutes. Get medical attention if irritation develops.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. Mouth-to-mouth resuscitation of oral exposure patients is not recommended. First-aiders with contaminated clothing should be properly decontaminated.

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

#### Over-exposure signs/symptoms

## SECTION 4: First aid measures

- Eye contact** : May cause irritation due to mechanical action.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. For professional, multilingual, medical support, in case of medical emergencies involving Nutrien products, telephone the Nutrien global 24 hour Emergency Number: 00-1-303-389-1654.

- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Non-flammable. Material will not burn. Decomposes on heating. Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Not applicable.

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

- Hazards from the substance or mixture** : In a fire, hazardous decomposition products may be produced. Exposure to decomposition products may cause a health hazard.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Collect contaminated fire-fighting water separately. It must not enter the sewage system.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- Additional information** : If mixed with chlorine or hypochlorites, it may form nitrogen trichloride which may explode spontaneously in air.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Avoid breathing dust. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused adverse impacts (sewers, waterways, soil or air).

## SECTION 6: Accidental release measures

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

- Small spill** : Move containers from spill area. Recover the material and use it for its intended purpose.
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Avoid creating dusty conditions and prevent wind dispersal. Recover the material and use it for its intended purpose.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid breathing dust. Prevent dust accumulation. Wear appropriate respirator when ventilation is inadequate.
- Advice on general occupational hygiene** : Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

Store in accordance with local regulations. May form steep piles that can collapse without warning when stored in bulk. Avoid forming steep slopes when removing product. Ensure that bulk bags or smaller packaged products stored in tiers are stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, rolling, or collapse. Use caution when opening truck or railcar doors as product may have shifted during transport.

Must be stored in a dry location. Absorbs moisture on long-term storage under high humidity conditions. Store away from incompatible materials (see Section 10). When product is stored in sealable containers, keep container tightly closed and sealed until ready for use. Sealable containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.

### 7.3 Specific end use(s)

- Recommendations** : Fertiliser. Manufacture of chemical products. Manufacture of intermediates. Manufacture of personal care products. Manufacture of pharmaceutical products. Manufacture of resins. Manufacture of speciality fertilisers. Pollution control products.
- Industrial sector specific solutions** : Not applicable. Non-hazardous product.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No exposure limit value known.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of



## SECTION 8: Exposure controls/personal protection

exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Urea	DNEL	Short term Inhalation	292 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	125 mg/m <sup>3</sup>	Consumers	Systemic

**DNEL/DMEL Summary** : Very low toxicity to humans or animals.

### PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Urea	Fresh water	0,47 mg/l	Assessment Factors: 100

**PNEC Summary** : Slightly harmful to aquatic organisms. Very low acute toxicity to fish.

## 8.2 Exposure controls

**Appropriate engineering controls** : Use with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Individual protection measures

**Hygiene measures** : Solid, low dustiness. If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist. Wash hands after handling.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

### Skin protection

**Hand protection** : The personal protective equipment required varies, depending upon your risk assessment. For prolonged or repeated handling, use the following type of gloves: leather work gloves

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or cotton/synthetic overalls or coveralls are normally suitable.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Solid. [Granular solid. Crystals. Powder.]
<b>Colour</b>	: White.
<b>Odour</b>	: Odourless.
<b>Odour threshold</b>	: Not available.
<b>pH</b>	: 8 [Conc. (% w/w): 10%]
<b>Melting point/freezing point</b>	: 134°C
<b>Initial boiling point and boiling range</b>	: Not available.
<b>Flash point</b>	: [Product does not sustain combustion.]
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Non-flammable substance. Non-combustible.
<b>Upper/lower flammability or explosive limits</b>	: Not applicable.
<b>Vapour pressure</b>	: 0.0000013 kPa [20°C]
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: 1.33
<b>Solubility(ies)</b>	: Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/ water</b>	: <-1.73
<b>Auto-ignition temperature</b>	: Not applicable.
<b>Decomposition temperature</b>	: >135°C
<b>Viscosity</b>	: Not applicable.
<b>Explosive properties</b>	: If mixed with chlorine or hypochlorites, it may form nitrogen trichloride which may explode spontaneously in air.
<b>Oxidising properties</b>	: Not available.

### 9.2 Other information

<b>Solubility in water</b>	: 624 g/l
<b>Molecular weight</b>	: 60.07 g/mole

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: Avoid creating dusty conditions and prevent wind dispersal. Hygroscopic. Absorbs moisture on long-term storage under high humidity conditions. Store in a well-ventilated, dry place. Protect from moisture.
<b>10.5 Incompatible materials</b>	: Reactive or incompatible with the following materials: chlorine-based bleaching agents, oxidizing materials
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.



## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Urea	LD50 Oral	Mouse - Male	11500 mg/kg	-
	LD50 Oral	Rat - Male	14300 mg/kg	-
	LD50 Subcutaneous	Mouse - Female	9200 mg/kg	-
	LDLo Oral	Cattle - Male, Female	600 mg/kg	-

**Conclusion/Summary** : Very low toxicity to humans or animals. Not considered to be acutely toxic.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Urea	Skin - Erythema/Eschar	Rabbit	0	-	-

#### Conclusion/Summary

**Skin** : May cause slight transient irritation. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. Effects are not sufficient for classification as hazardous.

**Eyes** : May cause slight transient irritation. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. Effects are not sufficient for classification as hazardous.

**Respiratory** : May cause slight transient irritation. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat. Effects are not sufficient for classification as hazardous.

#### Sensitisation

#### Conclusion/Summary

**Skin** : Non-sensitiser to skin.

**Respiratory** : Non-sensitiser to lungs.

#### Mutagenicity

Product/ingredient name	Test	Experiment	Result
Urea	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Cell: Somatic Metabolic activation: With and without	Negative

**Conclusion/Summary** : No mutagenic effect.

#### Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Urea	Negative - Oral - TC	Rat - Male, Female	2250 mg/kg Continuous	-

**Conclusion/Summary** : No known significant effects or critical hazards.

#### Reproductive toxicity

**Conclusion/Summary** : No known significant effects or critical hazards.

#### Teratogenicity

**Conclusion/Summary** : No known significant effects or critical hazards.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

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## SECTION 11: Toxicological information

Not available.

**Information on likely routes of exposure** : Skin contact  
Inhalation (dusts and mists)

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : In a fire, hazardous decomposition products may be produced. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : May cause irritation due to mechanical action.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : See above.  
**Potential delayed effects** : See above.

#### Long term exposure

**Potential immediate effects** : See above.  
**Potential delayed effects** : See below.

#### Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Urea	Chronic NOAEL Oral	Rat - Male, Female	2250 mg/kg Continuous	12 months Continuous

**Conclusion/Summary** : No known significant effects or critical hazards.  
**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

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## SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
Urea	Acute EC50 3910000 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <24 hours	48 hours
	Acute LC50 >1000 mg/L Marine water	Crustaceans - Chaetogammarus marinus - Young - 5 mm	48 hours
	Acute LC50 5000 ug/L Fresh water	Fish - Colisa fasciata - Fingerling	96 hours
	Acute LC50 22500 ug/L	Fish - Tilapia mossambica	96 hours

**Conclusion/Summary** : Practically non-toxic to aquatic organisms. Based on available data, the classification criteria are not met.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Urea	OECD 302B Inherent Biodegradability: Zahn-Wellens/ EMPA Test	96 % - Readily - 16 days	-	-

**Conclusion/Summary** : According to EC criteria: Readily biodegradable

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Urea	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Urea	<-1.73	-	low

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : 0.037

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**PBT** : No.

**vPvB** : No.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Recycle to process, if possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

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## SECTION 13: Disposal considerations

**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

### European waste catalogue (EWC)

Waste code	Waste designation
06 10 99	wastes not otherwise specified

### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ICAO
14.1 UN number	Not regulated.	Not regulated.	Not regulated	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

## SECTION 15: Regulatory information

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

### EU Regulation (EC) No. 1907/2006 (REACH)

#### Annex XIV - List of substances subject to authorisation

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

## SECTION 15: Regulatory information

### Other EU regulations

**Europe inventory** : This material is listed or exempted.

### Ozone depleting substances (1005/2009/EU)

Not listed.

### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

### Seveso Directive

This product is not controlled under the Seveso III Directive.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

**Australia** : This material is listed or exempted.

**Canada** : This material is listed or exempted.

**China** : This material is listed or exempted.

**Japan** : **Japan inventory (ENCS)**: This material is listed or exempted.  
**Japan inventory (ISHL)**: Not determined.

**Malaysia** : Not determined.

**New Zealand** : This material is listed or exempted.

**Philippines** : This material is listed or exempted.

**Republic of Korea** : This material is listed or exempted.

**Taiwan** : This material is listed or exempted.

**Turkey** : Not determined.

**United States** : This material is listed or exempted.

**15.2 Chemical safety assessment** : Complete.

## SECTION 16: Other information

🔍 Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
vPvB = Very Persistent and Very Bioaccumulative

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## SECTION 16: Other information

**Key literature references and sources for data** : REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 DECEMBER 2006, with successive adaptations, amendments, and corrigenda.  
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 16 DECEMBER 2008, with successive adaptations, amendments, and corrigenda.  
ECHA, European Chemicals Agency, Classification and Labelling Database  
DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 4 JULY 2012 on the control of major-accident hazards involving dangerous substances  
European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), latest revision.  
Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods, with successive amendments.  
REGULATION (EC) No 2003/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 13 OCTOBER 2003 RELATING TO FERTILISERS, with successive adaptations, amendments, and corrigenda.  
American Conference of Governmental Industrial Hygienists, Threshold Limit Values for Chemical Substances, latest edition.  
Corrosion Data Survey, Sixth Edition, 1985, National Association of Corrosion Engineers  
ERG 2016 Emergency Response Guidebook  
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans.  
The Fertilizer Institute, Toxicity Testing Results, March 2003  
Substance Information Exchange Forum Database

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
The product is NOT classified as hazardous according to Regulation (EC) 1272/2008 as amended.	Weight of evidence

### Full text of abbreviated H statements

Not applicable.	
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### Full text of classifications [CLP/GHS]

Not applicable.

**Date of issue/ Date of revision** : 3/22/2019

**Date of previous issue** : 8/2/2018

**Version** : 3.6

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## SECTION 16: Other information

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