

SAFETY DATA SHEET

Ammonium Sulphate, Crystalline, 21-0-0

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

1.1 Product identifier

Product name : Ammonium Sulphate, Crystalline, 21-0-0

EC number : 231-984-1

REACH Registration number

| Registration number | Substance |
|-----------------------|-------------------|
| 01-2119455044-46-XXXX | Ammonium sulphate |

CAS number : 7783-20-2

Product code : 3271-27950; 3271-30606; 3271-30792; 3346-27950; 3346-30606; 3347-31449; 3636-27950

Product description : EC FERTILISER Straight Fertiliser Sulphate of Ammonia, Crystallised 21-0-0

Product type : Solid.

Other means of identification : Not available.

Chemical formula : O4-S.2H4-N

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 speciality fertilisers. | |
| Uses advised against | Reason |
| Not applicable | Non-hazardous substance. |

1.3 Details of the supplier of the safety data sheet

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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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AZERBAIJAN +994 125 979 924
BELARUS +375 17 287 00 92
BELGIUM +32 70 245 245
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ESTONIA 16662; +372 62 69 379
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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
ICELAND +354 543 22 22
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Firenze +39 55 794 7819
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Genoa +39 10 563 62 45
Milan +39 02 6610 1029
Padova +39 49 827 50 78
Pavia +39 38 224 444
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Lodz +48 42 63 14 724
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Warszawa +48 22 619 66 54
Wroclaw +48 71 343 30 08
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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]

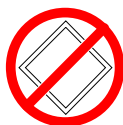
Not classified. The product is NOT classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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.

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 : Not applicable. Inorganic salt.

Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : Not applicable. Inorganic salt.

Other hazards which do not result in classification : Not available.

SECTION 3: Composition/information on ingredients

3.1 Substances : Mono-constituent substance

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Type |
|-------------------------|--|----------|-------------------------------------|------|
| Ammonium sulphate | REACH #: 01-2119455044-46-XXXX EC No.: 231-984-1 CAS: 7783-20-2 | 96 - 100 | Not classified. | [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. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms appear. 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** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- 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 adverse health effects persist or are severe.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. Decontaminate emergency personnel and equipment with soap and water.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : No specific data.

SECTION 4: First aid measures

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. Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

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:
nitrogen oxides
sulfur 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 : Not available. Contain and collect the water used to fight the fire for later treatment and disposal.

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. Wear appropriate respirator when ventilation is inadequate. 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). May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

SECTION 6: Accidental release measures

- Small spill** : Move containers from spill area. Recover the material and use it for its intended purpose
or
Place spilt material in an appropriate container for disposal. Dispose of via a licensed waste disposal contractor.
- Large spill** : No additional information.
- 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). Avoid breathing dust. 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** : Not available.
- Industrial sector specific solutions** : Not applicable. Non-hazardous substance.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|--------------------------------|---|
| No exposure limit value known. | Check your local regulations to determine if exposure limits exist for soluble dusts. (Inhalable fraction or Respirable fraction) |

- 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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

DNELs/DMELs

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SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|-------------------------|------|----------------------|-------------------|------------|----------|
| Ammonium sulphate | DNEL | Long term Inhalation | 11,2 mg/kg bw/day | Workers | Systemic |

DNEL/DMEL Summary : Not considered to be toxic to humans.

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|-------------------------|--------------------|------------|--------------------|
| Ammonium sulphate | Fresh water | 0,312 mg/l | Assessment Factors |

PNEC Summary : Slightly harmful to aquatic organisms.

8.2 Exposure controls

Appropriate engineering controls : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure 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. Possible: safety glasses with side-shields

Skin protection

Hand protection : The personal protective equipment required varies, depending upon your risk assessment. No special measures are typically indicated.

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. No special protective clothing is required.

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

- Physical state** : Crystalline solid.
- Colour** : White or Clear.
- Odour** : Odourless.
- Odour threshold** : Not applicable
- pH** : 5 to 6 [Conc. (% w/w): 10%]
- Melting point/freezing point** : Decomposition temperature: 235.01°C
- Initial boiling point and boiling range** : Decomposes on heating. Not applicable
- Flash point** : [Product does not sustain combustion.]
- Evaporation rate** : Not applicable.

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SECTION 9: Physical and chemical properties

| | |
|---|--|
| Flammability (solid, gas) | : Not applicable. |
| Upper/lower flammability or explosive limits | : Not applicable. |
| Vapour pressure | : Not applicable |
| Vapour density | : Not applicable |
| Relative density | : 1.78 |
| Solubility(ies) | : Easily soluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/ water | : Not available. |
| Auto-ignition temperature | : Not applicable. Decomposes on heating. |
| Decomposition temperature | : 235°C |
| Viscosity | : Solid. Not applicable. |
| Explosive properties | : This material is not explosive. May react explosively when mixed with chlorinated materials such as hypochlorites. |
| Oxidising properties | : Not applicable. No oxidising ingredients present. |

9.2 Other information

Solubility in water : Soluble in water in any proportion.

No additional information.

SECTION 10: Stability and reactivity

| | |
|--|--|
| 10.1 Reactivity | : Not considered to be reactive. |
| 10.2 Chemical stability | : The product is stable. |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : Hygroscopic. Keep container tightly closed. Absorbs moisture on long-term storage under high humidity conditions. |
| 10.5 Incompatible materials | : Incompatible with: Incompatible with copper alloys, copper, and zinc. strong acids strong alkalis Incompatible with halogens, hydrogen peroxide, chlorinated hydrocarbons, fluorine, nitric acid, oxidising agents and sulphuric acid. |
| 10.6 Hazardous decomposition products | : 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 |
|-------------------------|-----------|-------------------------|-------------|----------|
| Ammonium sulphate | LD50 Oral | Mouse - Male, Female | 3040 mg/kg | - |
| | LD50 Oral | Rat - Male, Female | >2000 mg/kg | - |

Conclusion/Summary : Very low toxicity to humans or animals. Effects are not sufficient for classification as hazardous.

Irritation/Corrosion

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SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------|---------|-------|----------|-------------|
| Ammonium sulphate | Skin | Rabbit | 0 | 20 hours | 24 hours |
| | Eyes | Rabbit | 0 | - | 72 hours |

Conclusion/Summary

- Skin** : Non-irritating to the skin.
Eyes : Non-irritating to the eyes.
Respiratory : Non-irritating to the respiratory system.

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|-------------------------|-------------------|------------|-----------------|
| Ammonium sulphate | skin | Guinea pig | Not sensitizing |

Conclusion/Summary

- Skin** : Not sensitizing
Respiratory : Not sensitizing

Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|-------------------------|----------|--|----------|
| Ammonium sulphate | OECD 476 | Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic | Negative |
| | OECD 473 | Experiment: In vitro Subject: Mammalian-Animal Cell: Germ | Negative |

Conclusion/Summary

: No mutagenic effect.

Carcinogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|------------------------|-----------------------|------------|-----------------------------|
| Ammonium sulphate | Negative - Oral - TCLo | Rat - Male, Female | 1288 mg/kg | 2 years; 7 days per week |

Conclusion/Summary

: No carcinogenic effect.

Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Developmental toxin | Species | Dose | Exposure |
|-------------------------|-------------------|-----------|---------------------|-------------------------|-------------------------|----------|
| Ammonium sulphate | Negative | Negative | - | Mouse - Male, Female | Oral: 5000 mg/ kg | - |

Conclusion/Summary

: No known significant effects or critical hazards.

Teratogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------------|-----------------------|------------|----------|
| Ammonium sulphate | Negative - Oral | Rat - Male, Female | 1500 mg/kg | - |

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

Not available.

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SECTION 11: Toxicological information

Information on likely routes of exposure : Skin contact
Inhalation

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : 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 : No specific data.
Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
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 : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|--------------------|-----------------------|-----------|---------------------------|
| Ammonium sulphate | Chronic NOAEL Oral | Rat - Male, Female | 256 mg/kg | 52 weeks; 7 days per week |

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

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|-----------------------------------|---|----------|
| Ammonium sulphate | Acute LC50 14000 ug/L Fresh water | Daphnia - Daphnia magna - Young - <=24 hours | 48 hours |
| | Acute LC50 53 mg/l | Fish - Oncorhynchus mykiss | 96 hours |

Conclusion/Summary : Very low acute toxicity to fish. Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Conclusion/Summary : Not applicable

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SECTION 12: Ecological information

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable. Inorganic salt.

vPvB : Not applicable. Inorganic salt.

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. 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.

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 from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture 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 : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

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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 : Not available.

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.

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)

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SECTION 15: Regulatory information

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 | : All components are listed or exempted. |
| Canada | : All components are listed or exempted. |
| China | : All components are listed or exempted. |
| Japan | : Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : Not determined. |
| Malaysia | : Not determined. |
| New Zealand | : All components are listed or exempted. |
| Philippines | : All components are listed or exempted. |
| Republic of Korea | : All components are listed or exempted. |
| Taiwan | : All components are listed or exempted. |
| Turkey | : Not determined. |
| United States | : All components are 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

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

Ammonium Sulphate, Crystalline, 21-0-0

SECTION 16: Other information

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 |
|---|--------------------|
| Not classified. 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.

Full text of classifications [CLP/GHS]

Not applicable.

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Notice to reader

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