

SAFETY DATA SHEET

Ammonium Sulphate, Granular, 21-0-0

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

1.1 Product identifier

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

EC number : 231-984-1

REACH Registration number

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

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

Product type : Solid.

Other means of : Not available.

identification

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

Mutrien 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 Saf

: 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

AUSTRIA +43 1 406 43 43 AZERBAIJAN +994 125 979 924 BELARUS +375 17 287 00 92 BELGIUM +32 70 245 245

BULGARIA +359 2 9154 378; +359 887 435 325

CROATIA +358 1 2348 342

CZECH REPUBLIC +420 22 49 192 93

DENMARK +45 82 12 12 12

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 1/15

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

ESTONIA 16662; +372 62 69 379 FINLAND +358 9 471977 **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 IRELAND +353 1 837 9964 (medical professionals) +353 1 809 2166 (public) ISRAEL +972 4 854 19 00 **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 Lòdz +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) ROMANIA +402 212 106 282 **RUSSIAN FEDERATION** Ekaterinburg +7 343 229 98 57 Moscow +7 495 628 1687 Saint-Petersburg +7 921 757 3228 SERBIA +381 11 3608 440 SLOVAKIA +421 2 5477 4166 SLOVENIA +386 41 635 500

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 2/15

SWEDEN 112 (national callers); +46 (0)10 456 6700 SWITZERLAND +41 44 251 51 51 (in Switzerland dial 145)

SPAIN +34 91 562 0420

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

THE FORMER YUGOSLAVIA +38 923 147 635 TURKEY +90 0312 433 70 01 or 0 800 314 7900

UNITED KINGDOM Belfast 844 892 0111 Birmingham 844 892 0111 Edinburgh 844 892 0111

Newcastle Upon Tyne +44 191 2606182; +44 191 2606180

Penarth 844 892 0111

Supplier

Telephone number : Mutrien Europe SA

> **EMERGENCY TELEPHONE NUMBERS:** Transportation: 00-1-303-389-1654 Medical: 00-1-303-389-1654

: 24/7/365 Hours of operation

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]

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) 1272/2008 on classification, labelling and packaging of substances and mixtures. 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



No signal word. Signal word **Hazard statements** : Not applicable.

Precautionary statements

Read label before use. Keep out of reach of children. If medical advice is needed, General

have product container or label at hand.

Prevention : Not applicable. : Not applicable. Response **Storage** : Not applicable. **Disposal** : Not applicable. **Hazardous ingredients** : ammonium sulphate

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

Date of issue/Date of revision :8/2/2018 3/15 : 3/22/2019 Date of previous issue Version : 2.4

Ammonium Sulphate, Granular, 21-0-0

SECTION 2: Hazards identification

Containers to be fitted with child-resistant

;u

: Not applicable.

fastenings

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.

P: Not available. B: Not available. T: Not available.

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

Not applicable. Inorganic salt.
 vP: Not available. vB: Not available.

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]	Туре
Ammonium sulphate	REACH #: 01-2119455044-46-XXXX EC No.: 231-984-1 CAS: 7783-20-2	98 - 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 person to fresh air. No known significant effects. Seek medical attention for

any signs of wheezing and/or breathing difficulties. For additional advice call the medical emergency number on this SDS or your poison center or medical provider.

Skin contact : Wash with soap and 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: May cause irritation due to mechanical action.

Inhalation : No specific data.

Date of issue/Date of revision : 3/22/2019 Date of previous issue :8/2/2018 Version : 2.4 4/15

Ammonium Sulphate, Granular, 21-0-0

SECTION 4: First aid measures

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. 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: 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

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 5/15

Ammonium Sulphate, Granular, 21-0-0

SECTION 6: Accidental release measures

Small spill : Move containers from

: Move containers from spill area. Use appropriate equipment to put the spilled

substance in a container for reuse or disposal. Recycle, if possible.

or

Place spilt material in an appropriate container for disposal.

Large spill : Move containers from spill area. Prevent entry into sewers, water courses,

basements or confined areas. Recover the material and use it for its intended

purpose,

or

Vacuum or sweep up material and place in a designated, labelled waste container.

Dispose of via a licensed waste disposal contractor.

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. Do not ingest. 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. Fertiliser Blend Component

Industrial sector specific : Not applicable. Non-hazardous substance.

solutions

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
I .	Check your local regulations to determine if exposure limits exist for soluble dusts. (Respirable fraction or Inhalable fraction.)

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 6/15

Ammonium Sulphate, Granular, 21-0-0

SECTION 8: Exposure controls/personal protection

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

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 or sealed eyewear

Skin protection

Hand protection

: The personal protective equipment required varies, depending upon your risk assessment. No special measures are typically indicated. Recommended: leather work gloves

Body protection

: No special protective clothing is required. 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

Physical state : Granular solid.
Colour : Greyish-white.
Odour : Odourless.
Odour threshold : Not applicable

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 7/15

SECTION 9: Physical and chemical properties

pН : Not available.

Melting point/freezing point

Initial boiling point and boiling

range

: Decomposition temperature: 235°C

Decomposes on heating. Not applicable

[Product does not sustain combustion.] Flash point

Evaporation rate Not applicable. Non-flammable. Flammability (solid, gas) Upper/lower flammability or : Not applicable.

explosive limits

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/ : Not available.

water

Auto-ignition temperature Decomposes on heating. Not applicable

Decomposition temperature : 235°C

Viscosity Solid. Not applicable.

: This material is not explosive. May react explosively when mixed with chlorinated **Explosive properties**

materials such as hypochlorites.

Oxidising properties : Not applicable. No oxidising ingredients present.

9.2 Other information

Solubility in water : 767 g/l

Molecular weight : 132.14 g/mole

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.

10.5 Incompatible materials : Incompatible with:

strong acids strong alkalis

Incompatible with halogens, hydrogen peroxide, chlorinated hydrocarbons, fluorine,

nitric acid, oxidising agents and sulphuric acid.

Incompatible with copper alloys, copper, and zinc.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Date of issue/Date of revision : 3/22/2019 :8/2/2018 8/15 Date of previous issue Version :2.4

Ammonium Sulphate, Granular, 21-0-0

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.

Irritation/Corrosion

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 sensitizingRespiratory: 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	-	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	-

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 9/15

Ammonium Sulphate, Granular, 21-0-0

SECTION 11: Toxicological information

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.

Information on likely routes

of exposure

: Routes of entry anticipated: Inhalation..

Potential acute health effects

Eye contact: No known significant effects or critical hazards. May cause irritation due to

mechanical action.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Skin contactIngestionNo known significant effects or critical hazards.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

: No known significant effects or critical hazards.

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

Long term exposure

Potential immediate

: No known significant effects or critical hazards.

effects

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: Very low toxicity to humans or animals.

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.

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 10/15

Ammonium Sulphate, Granular, 21-0-0

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 mykis	96 hours

Conclusion/Summary: Very low acute toxicity to fish.

12.2 Persistence and degradability

Conclusion/Summary : Not applicable

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable. Inorganic salt.

P: Not available. B: Not available. T: Not available.

vPvB : Not applicable. Inorganic salt.

vP: Not available. vB: Not available.

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		
	wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture		
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.

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 11/15

SECTION 13: Disposal considerations

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

	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 <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

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 : Not applicable.

on the manufacture,

placing on the market and

use of certain dangerous

use of certain dangerous

substances, mixtures and

articles

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

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 12/15

Ammonium Sulphate, Granular, 21-0-0

SECTION 15: Regulatory information

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

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

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 13/15

SECTION 16: Other information

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
This product does not meet the criteria for classification in any hazard class according to Regulation (EC) 1272/2008 on classification, labelling and packaging of substances and mixtures. Not classified.	Evaluation

Full text of abbreviated H statements

Not applicable.

Full text of classifications [CLP/GHS]

Not applicable.

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

revision

Date of previous issue : 8/2/2018 Version : 2.4

Notice to reader

DISCLAIMER AND LIMITATION OF LIABILITY

The information and recommendations contained in this Safety Data Sheet ("SDS") relate only to the specific material referred to herein (the "Material") and do not relate to the use of such Material in combination with any other material or process. The information and recommendations contained herein are believed to be current and correct as of the date of this SDS. HOWEVER, THE INFORMATION AND RECOMMENDATIONS ARE PRESENTED WITHOUT WARRANTY, REPRESENTATION OR LICENSE OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THEIR ACCURACY, CORRECTNESS OR COMPLETENESS, AND THE SELLER, SUPPLIER AND MANUFACTURER OF THE MATERIAL AND THEIR RESPECTIVE AFFILIATES (COLLECTIVELY, THE "SUPPLIER") DISCLAIM ALL LIABILITY FOR RELIANCE ON SUCH INFORMATION AND RECOMMENDATIONS. This SDS is not a guarantee of safety. A buyer or user of the Material (a "Recipient") is responsible for ensuring that it has all current information necessary to safely use the Material for its specific purpose.

FURTHERMORE, THE RECIPIENT ASSUMES ALL RISK IN CONNECTION WITH THE USE OF THE MATERIAL. THE RECIPIENT ASSUMES ALL RESPONSIBILITY FOR ENSURING THE MATERIAL IS USED IN A SAFE MANNER IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL, HEALTH, SAFETY AND SECURITY LAWS, POLICIES AND GUIDELINES. THE SUPPLIER DOES NOT WARRANT THE MERCHANTABILITY OF THE MATERIAL OR THE FITNESS OF THE MATERIAL FOR ANY PARTICULAR USE AND ASSUMES NO RESPONSIBILITY FOR INJURY OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY OR RELATED TO THE USE OF THE MATERIAL.

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 14/15

Ammonium Sulphate, Granular, 21-0-0

Date of issue/Date of revision : 3/22/2019 Date of previous issue : 8/2/2018 Version : 2.4 15/15