



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 Identification
01-2119455044-46-XXXX	Ammonium sulphate

Product code : 3271-30015

Product description : EC FERTILISER Sulphate of Ammonia 21-0-0

Product type : 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 speciality fertilisers.	
Uses advised against	Reason
Not applicable	Non-hazardous substance.

1.3 Details of the supplier of the safety data sheet

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

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

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Agrium Safety Data Sheets are available in many languages at <http://www.agrium.com/products/ae>
Physicians, Poison Centres, or the Public may contact Agrium'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
BULGARIA +359 2 9154 378; +359 887 435 325
CROATIA +358 1 2348 342
CZECH REPUBLIC +420 22 49 195 93
DENMARK +45 82 12 12 12
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

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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
 Łódź +48 42 63 14 724
 Sosnowiec +48 32 266 11 45
 Warszawa +48 22 619 66 54
 Wrocław +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
 SPAIN +34 91 562 0420
 SWEDEN 112 (national callers); +46 (0)10 456 6700
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Supplier

Telephone number : Agrium 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.

2.2 Label elements



Hazard statements : Not applicable.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Special packaging requirements

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

Tactile warning of danger : Not applicable.

2.3 Other hazards

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

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	<u>Classification</u> Regulation (EC) No. 1272/2008 [CLP]	Type
Europe Ammonium sulphate	REACH #: 01-2119455044-46-XXXX EC No.: 231-984-1 CAS: 7783-20-2	96 - 100	Not classified.	[A]

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

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.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- 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** : 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.
- 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 thermal decomposition 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.

SECTION 5: Firefighting measures

- 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 environmental pollution (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

- 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

If applicable: The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

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

Absorbs moisture on long-term storage under high humidity conditions. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). May form steep piles that can collapse without warning when stored in bulk. Avoid forming steep slopes when removing product.

7.3 Specific end use(s)

- Recommendations** : Fertiliser.
- 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
Europe No exposure limit value known.	Check your local regulations to determine if exposure limits exist for soluble dusts. (Inhalable fraction or Respirable fraction)
Bulgaria Ammonium sulphate	РБ МТСП и МЗ Наредба №13/2003 (Bulgaria, 8/2007). Limit value 8 hours: 10 mg/m ³ 8 hour(s).
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

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.
Flammability (solid, gas)	: Not applicable.
Upper/lower flammability or explosive limits	: Not applicable.
Vapour pressure	: Not applicable
Vapour density	: Not applicable
Relative density	: Not available.
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

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.

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 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.

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SECTION 11: Toxicological information

Information on likely routes of exposure : Routes of entry anticipated: Oral, Inhalation.
Routes of entry not anticipated: Dermal.

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 : 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 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 : 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.

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.

12.2 Persistence and degradability

Conclusion/Summary : Not applicable

12.3 Bioaccumulative potential

Not available.

SECTION 12: Ecological information

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

If applicable: The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

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

	ADR/RID	ADN	IMDG	IATA
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.

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SECTION 14: Transport information

Additional information	-	-	-	-
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14.6 Special precautions for user : Not available.

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.

National regulations

Denmark

France

Reinforced medical surveillance : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

Germany

Storage class (TRGS 510) : 13

Hazard class for water : 1 Appendix No. 2

Technical instruction on air quality control : TA-Luft Number 5.2.1

Italy

D.Lgs. 152/06 : Not classified.

Netherlands

Water Discharge Policy (ABM) : {5} Very toxic to aquatic organisms. Abatement effort: B

Biocidal products regulation : Not applicable.

Ordinance on Thermoset Plastics : Not applicable.

Thermoset plastic waste : Not available.

Waste group : Not available.

Switzerland

VOC content : Exempt.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

SECTION 15: Regulatory information

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

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : Complete.

SECTION 16: Other information

Revision comments : Reference to classifications under Directive 1999/45/EC have been removed in accordance with current regulatory requirements given in Regulation (EC) No. 1272/2008, and Regulation (EC) No. 1907/2006.

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
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 2012 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.	Evaluation

Europe

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SECTION 16: Other information

Full text of abbreviated H statements : Not applicable.

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

Date of printing : 8/18/2016

Date of issue/ Date of revision : 8/18/2016

Date of previous issue : 10/7/2015

Version : 2.1

Notice to reader

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