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

- 1.1 Product identifier

- Trade name: AMMONIUM SULFATE 21%

- Article number: MP 012179

- CAS Number:

7783-20-2

- EC number:

231-984-1

- Registration number 01-2119455044-46
- -1.2 Relevant identified uses of the substance or mixture and uses advised against.
- Application of the substance / the mixture

Fire retarding agent

Industrial auxiliary

Paper industry

Leather auxiliary

pH-corrective agent

Laboratory chemicals

Laboratory chemicals

Intermediate of synthesis.

- 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

ECSA Chemicals AG

Via Luigi Favre 16 - CH-6828 Balerna (Chiasso); Burgauerstrasse 17 - CH-9230 Flawil (SG) tel.+41 58 211 91 00 - fax +41 58 211 91 01

ECSA Maintenance AG

Burgauerstrasse 17 - CH-9230 Flawil (SG) tel.+41 58 211 93 00 - fax +41 58 211 93 01

ECSA Energy SA

Via Luigi Favre 16 - CH-6828 Balerna (Chiasso) tel.+41 58 211 95 00 - fax +41 58 211 95 01

ECSA ITALIA Srl Società con Unico Socio

Via Lav. Autobianchi 1 - I-20832 Desio (MB) tel. +39 0362 625 421 - fax +39 0362 304 361

- Informing department: Product safety department: quality@ecsa.ch

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

The substance is not classified, according to the CLP regulation.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

- 3.1 Substances
- CAS No. Designation:

7783-20-2 ammonium sulphate

- Identification number(s):
- **EC** number: 231-984-1
- Additional information: Chemical formula: (NH₄) 2SO₄

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information Personal protection for the First Aider.
- After inhalation Supply fresh air; consult doctor in case of symptoms.
- After skin contact

Remove contaminated clothing.

Clean with water and soap.

If the skin is irritated, consult a doctor.

- After eye contact

Remove contact lenses, if present and easy to do.

Rinse opened eye for at least 15 minutes under running water; then consult doctor.

- After swallowing

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Wash out mouth with water if person is conscious.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- -4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents

Use fire fighting measures that suit the environment.

Water haze

Carbon dioxide

- 5.2 Special hazards arising from the substance or mixture

Can be released in case of fire:

Nitrogen oxides (NOx)

Sulfuric oxides (SOx)

Ammonia (NH₃)

- 5.3 Advice for firefighters
- Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves)

- Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Avoid causing dust.

Warning: This product makes surfaces very slippery.

- 6.2 Environmental precautions: Do not allow to enter drainage system, surface or ground water.

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- 6.3 Methods and material for containment and cleaning up:

Vacuuming can prevent the dust formation.

Collect mechanically.

Send for recovery or disposal in closed suitable containers.

Dispose of the material collected according to regulations.

- 6.4 Reference to other sections No dangerous materials are released.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed containers.

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

- Information about protection against explosions and fires: Keep breathing equipment ready.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and containers:

Do not store in unmarked containers or vessel.

Store in original container.

Non suitable material:

copper

zinc

- Information about storage in one common storage facility:

Incompatible products:

nitrites

- Further information about storage conditions:

This product is hygroscopic.

Protect from humidity and keep away from water.

- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
- Components with limit values that require monitoring at the workplace: Not required.
- 8.2 Exposure controls

Appropriate engineering controls:

Limit the formation of dust

- Personal protective equipment
- General protective and hygienic measures

The usual precautionary measures should be adhered to general rules for handling chemicals.

Avoid contact with the eyes and skin.

Do not inhale dust / smoke / mist.

Wash hands during breaks and at the end of the work.

Do not eat, drink or smoke while working.

- Breathing equipment: Breathing protection recommended.

- Protection of hands:

Protective gloves.

Chemical resistant gloves (EN 374)

- Material of gloves Natural rubber, NR

- Eye protection:

Safety glasses

Equipment should conform to EN 166.

- Body protection:

Wear protective clothing

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Safety shoes.

- Limitation and supervision of exposure into the environment Do not allow product to reach drains and waterways.

SECTION 9: Physical and chemical properties

-9.1 Information on basic physical an	d chemical properties
- General Information - Appearance:	
- Appeurunce. Form:	Crystalline
Colour:	White
- Odour:	Odourless
- Odour threshold:	Not determined.
pH-value at 20 °C:	4-5
- Change in condition	
Melting point/freezing point:	Not applicable
Initial boiling point and boiling ran	nge: Not determined
Flash point:	Not applicable
- Inflammability (solid, gaseous)	Product is not inflammable.
-Ignition temperature:	Not applicable.
Decomposition temperature:	280 °C (release NH ₃)
- Self-inflammability:	Not determined.
- Explosive properties:	Product is not explosive.
- Critical values for explosion:	
Lower:	Not applicable
Upper:	Not applicable
Oxidising properties	Not determined
Vapour pressure:	Not determined.
- Density	1.77 g/cm3
Settled apparent density	0.95-1.1 g/cm ³
- Relative density	Not determined.
- Vapour density	Not determined.
- Evaporation rate	Not determined.
- Solubility in / Miscibility with	

76.7 g/100g

Not determined.

Not determined.

No further relevant information available.

SECTION 10: Stability and reactivity

- Partition coefficient: n-octanol/water:

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability

Water at 20 °C:

- 9.2 Other information

- Viscosity: dynamic:

- Thermal decomposition / conditions to be avoided:

High temperatures

Thermal decomposition: 280 °C

- 10.3 Possibility of hazardous reactions Reacts with alkalis releasing ammonia
- 10.4 Conditions to avoid Avoid dust formation.

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- 10.5 Incompatible materials: nitriles
- 10.6 Hazardous decomposition products:

Ammonia

Nitrogen oxides (NOx) Sulphur oxides (SOx)

SECTION 11: Toxicological information

- -11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- -STOT-single exposure Based on available data, the classification criteria are not met.
- -STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- -12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes: Do not allow product to reach ground water, water bodies or sewage system.
- 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- vPvB: Not applicable.
- -12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation

Must be specially treated under adherence to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number

- ADR, ADN, IMDG, IATA Void

- 14.2 UN proper shipping name

- ADR, ADN, IMDG, IATA Void

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- 14.3 Transport hazard class(es)	
-ADR, ADN, IMDG, IATA	
- Class	Void
- 14.4 Packing group	
- ADR, IMDG, IATA	Void
- 14.5 Environmental hazards:	Not applicable.
- 14.6 Special precautions for user	Not applicable.
- 14.7 Transport in bulk according to Annex II of Ma	arpol
and the IBC Code	Not applicable.
- UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

Regulation (EC) n° 1907/2006

Regulation (EC) n° 1272/2008

Regulation (EC) n° 830/2015

Regulation (EC) n° 487/2013

OPChim 813.11

- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 65
- -15.2 Chemical safety assessment:

The chemical safety assessment has been carried out. An exposure scenario is not applicable (the substance is not classified).

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing data specification sheet: Environment protection department.
- Abbreviations and acronvms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

- Sources ECHA Registered Substances Database
- * Data compared to the previous version altered.