Magruder 260815 28-0-5-S6

Results due September 15, 2026

Guaranteed Analysis

Total Nitrogen (N) ..... 28.0 %
15.8 % Ammoniacal Nitrogen
12.2% Nitrate Nitrogen
Soluble Potassium (K_2O) ..... 5.0 %
Sulfur (S) .....6.0 %
6.0 % Combined Sulfur

Derived from: Ammonium Sulfate, Ammonium Nitrate and Potassium Sulfate

Also analyze for:
As (ppm), Cd (ppm), Cr (ppm), Co (ppm), Pb (ppm),
Hg (ppm), Mo (ppm), Ni (ppm), Se (ppm), Cu (%) and Zn (%)

The units above are those required for reporting data from this Magruder sample. They may not be the units required on a commercial fertilizer label.

Note: This Magruder Check Sample material is not to be used in the manufacture of products nor applied to any crops or for other fertilizer uses. It is intended for analytical testing purposes only.

SDS for this product can be found at:
https://www.magrudercheckssample.org/SDS/260815GuarSDS.pdf

SDS for Magruder 260815

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product form: Double-salt
Trade name: **NPK(S) 28-0-5(6)(SOP), NPK(S) 26-0-7(9)(SOP)**
Product type: solid, granulate.
Chemical name: Double-salt of ammonium nitrate (CAS 6484-52-2), potassium sulphate (CAS 7778-80-5) and ammonium sulphate (CAS 7783-20-2).

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

1.2.1. Relevant identified uses:
The product is intended for agricultural use only as fertilizer
1.2.2. Uses advised against:
None

1.3. Details of the supplier of the safety data sheet

Manufacturer:
Uralchem, JSC
Presnenskaya Naberezhnaya 6, Bldg 2,
Moscow, 123112, Russia
KCKK Branch of URALCHEM JSC in Kirovo-Chepetsk, Pozharny Pereulok, 7, Kirovo-Chepetsk,
Kirov Oblast., 613040, Russia
Tel.: +7 (83361) 9-42-24
Fax: +7 (83361) 9-43-62
kckk@uralchem.com

Only representative:
Uralchem Assist GmbH
Johannssenstrasse 10
Hannover, D-30159, Germany
Tel.: + 49 511 45 99 445
Email: info@uralchem-assist.com

List of importers is available with the Only Representative.
E-Mail address for the competent person responsible for the safety data sheet: reach@uralchem.com

1.4. Emergency telephone number

+44 (0) 203 394 9870 (Available 24/7)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 on classification, labeling and packaging:

Not classified according to CLP Regulation.

According to the Assessment of Ammonium Nitrate based fertilizers as eye-irritant for classification purposes [2011] (report prepared by Fertilizers Europe)*:*
"Fertilizers containing ammonium nitrate with no more than 80 % ammonium nitrate do not have to be classified as eye irritant".

However, a safety data sheet is being supplied for it upon request as they contain substances for which there is a Union workplace exposure limit.

Adverse physicochemical, human health and environmental effects
No additional information available.

2.2. Label Elements

Labeling according to the Regulation (EC) No. 1272/2008 [CLP]
No labelling applicable.

2.3. Other hazard

PBT/vPvB: The double-salt does not contain any substances that are assessed to be a PBT or a vPvB.

The double-salt does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other hazards not contributing to the classification: double-salt contains Ammonium nitrate, classified as Ox. Solid 3, H272, Eye Irrtit.2, H319

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance: Not applicable.

3.2. Mixture: solid inorganic double-salt, NPK fertilizer

CAS number	EC number	Name	Concentration % w/w	Classification according to Regulation (EC) No. 1272/2008	Specific concentration limits/ M-Factor	Registration number under REACH Regulation
6484-52-2	229-347-8	Ammonium nitrate	53-69	Ox. Solid 3, H272 Eye Irrtit.2, H319	-	01-2119490981-27-0019
7778-80-5	231-915-5	Potassium sulphate	9-17	Not classified		01-2119489441-34-0005
7783-20-2	231-984-1	Ammonium sulphate	18-30	Not classified	-	01-2119455044-46-0032

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

4.1.1. General information:
In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).

4.1.2. Following inhalation:
In case of accident by inhalation: remove casualty to fresh air and keep at rest.Get medical advice/attention if you feel unwell.

4.1.3. Following skin contact:
After contact with skin, wash immediately with plenty of water and soap.Get medical advice/attention if you feel unwell

4.1.4. Following eye contact:
In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holdingeyelids apart. Subsequently consult an ophthalmologist.

4.1.5. Following ingestion:
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious). Do not induce vomiting. Obtain medical attention if symptoms occur.

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

Symptoms/effects:
after inhalation: coughing, vomiting, difficulties of breathing.
after skin contact: no known significant effects or critical hazards.
after eye contact: redness, lacrimation.
after ingestion: irritating to mouth, throat and stomach, nausea.

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

Get medical advice/attention if you feel unwell.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:
Water spray.
The product is not combustible.

Extinguishing media which must not be used for safety reasons:
Dry extinguishing powder.
Foam.
Sand.
Water steam.

5.2. Special hazards arising from the substance or mixture

Decomposition at temperature >200^{0}C can release toxic gases containing nitrogen oxides, sulphur oxides.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical resistant suit. Rubber boots. Rubber gloves. Avoid breathing the fumes (toxic); stand up-wind of the Fire. Open doors and windows of the store to give maximum ventilation.

5.4 Additional information.

No data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment :
Wear personal protection equipment. Remove all sources of ignition. Provide adequate ventilation. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid creating or spreading dust. Do not touch or walk on the spilled product.

Emergency procedures :
Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment :
Stop leak if safe to do so. Avoid any direct contact with the product. Do not attempt to take action without suitable protective equipment. For further information refer to section 8.
Emergency procedures :
Ventilate area.

6.2. Environmental precautions

Take care to avoid the contamination of watercourses and drains and inform the appropriate authority in case of accidental contamination of watercourses.

6.3. Methods and material for containment and cleaning up

Vacuum or sweep up material and place in a designated, labelled waste container. Clean up affected area with a large amount of water. Recycle, if possible. Do not collect spilled material in sawdust or other combustible material. Ventilate affected area.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Information for safe handling:

Use with adequate ventilation. Local exhaust ventilation should be provided. Avoid possible sources of ignition (spark or flame). Avoid contamination by any source, including metals, dust and organic materials.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool dry place. Keep storage area clean. Avoid contact with combustible, oxidizing substances and reducing materials. Do not expose to high temperatures.
Packaging materials (bags): polypropylene.

7.3. Specific end use(s)

Fertilizer

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Dust, inorganic		**Limit value***
Finland	LTEL 8hrTWA (mg/m³)	10
Sweden	LTEL 8hrTWA (mg/m³)	5 (inhalable dust); 2.5 (respirable dust)
Potassium sulphate (CAS 7778-80-5)		
Latvia	LTEL 8hrTWA (mg/m³)	10

*GESTIS International Limit Values

8.1.1. Recommended monitoring procedures

No additional information available.

8.1.2. Air contaminants formed

No additional information available.

8.1.3. Control banding

No additional information available.

8.1.4. DNEL and PNEC

	Ammonium nitrate (CAS 6484-52-2)	Potassium sulphate (CAS 7778-80-5)	Ammonium sulphate (CAS 7783-20-2)
DNEL/DMEL (Workers)			
Long-term - systemic effects, inhalation, mg/m³	36	37.6	11.167
Long-term - systemic effects, dermal mg/kg bw/day	5.12	21.3	42.667
Short-term - systemic effects, dermal, mg/kg bwday	-	-	-
Short-term-- systemic effects, inhalation , mg/m³	-	-	-
DNEL/DMEL (General population)			
Long-term - systemic effects, inhalation, mg/m³	8.9	11.1	1.667
Long-term - systemic effects,oral, mg/kg bw/day	2.56	12.8	6.4
Long-term - systemic effects, dermal mg/kg bw/day	2.56	12.8	12.8
Short -term - systemic effects,oral, mg/kg bw/day	-	-	-
Short-term - systemic effects, dermal, mg/kg bwday	-	-	-
Short-term- systemic effects, inhalation, mg/m³	-	-	-
PNEC (Water)			
PNEC aqua (freshwater), mg/L	-	0.68	0.312 AF=100
PNEC aqua (marine water), mg/L	-	0.068	0.0312 AF=100
PNEC aqua (intermittent, freshwater)	-	-	0.53
PNEC (STP)			

PNEC sewage treatment plant, mg/L	18 AF=10	10 AF=10	16.18 AF=100
PNEC Sediment (freshwater)	-	-	0.063 AF=100
PNEC Sediment (marine water)	-	-	-
PNEC Soil	-	-	62.6 AF=10

8.2. Exposure controls

8.2.1 Appropriate engineering controls

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Emergency safety showers should be available in the immediate vicinity of any potential exposure.
Provide extract ventilation to points where emissions occur. Establish monitoring systems for monitoring particulates (dust).
Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice.

8.2.2 Individual protection measures, such as personal protective equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection:
Wear eyeglasses with side protection according to EN 166. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. First aid kit.

8.2.2.2. Skin protection
Skin and body protection:
Rubber boots. Wear suitable protective clothing.

Hand protection:
Chemical resistant gloves EN ISO 374
The following materials are suitable for protective gloves (Permeation time >= 8 hours):
Natural rubber/Natural latex - NR (0,5 mm) (use non-powdered and allergen free products)
Polychloroprene - CR (0,5 mm)
Nitrile rubber/Nitrile latex - NBR (0,35 mm)
Butyl rubber - Butyl (0,5 mm)
Fluoro carbon rubber - FKM (0,4 mm)
Polyvinyl chloride - PVC (0,5 mm)

8.2.2.3. Respiratory protection
Respiratory protection: in case of insufficient ventilation or in the case of emergency wear appropriate mask. Dust mask with filter type P1, colour code - white.
8.2.2.4. Thermal hazards
No thermal hazard.
8.2.3. Environmental exposure controls
Environmental exposure controls: avoid release to the environment.
Other information:
Wash hands and face before breaks and after work. When using, do not eat, drink, or smoke.
Ensure operatives are trained to minimise exposures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state (at 20°C and 101.3 kPa):	Solid. Granulate.
Colour:	Not applicable.
Odour:	Odourless.
Melting point/freezing point:	170 °C

Boiling point or initial boiling point and boiling range:	Decomposes before boiling.
Flammability:	Non-flammable.
Lower and upper or explosion limit:	Not applicable.
Flash point:	Not applicable (inorganic solid).
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	>= 210 °C
pH:	>= 4.5 (10 % solution, 20 °C)
Kinematic viscosity:	Not applicable (solid).
Solubility:	Partially soluble in acetone, ethyl alcohol and methyl alcohol (information available for ammonium nitrate). Insoluble in fats.
Water solubility:	100 % soluble in water.
Partition coefficient: n-octanol/water:	Not relevant (inorganic solid).
Vapour pressure:	Not applicable.
Relative density:	1.00-1.05 g/cm^3 at 20 °C (bulk density)
Relative vapour density:	Not applicable.

Particle size distribution:	> 1 mm: 3 % max 1-5 mm: 90 % min > 6.3 mm: 100 %

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Explosives:	Not explosive
Oxidizing properties:	Not oxidizing
Self-reactive substances	Not self-reactive
Self-heating	Not self-heating
Corrosive to metals	Not corrosive to metals
Pyrophoric solids	Non-pyrophoric

9.2.2. Other safety characteristics

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage and handling conditions (see Section 7)

10.2. Chemical stability

Stable under recommended storage and handling conditions (see Section 7)

10.3. Possibility of hazardous reactions

No hazardous reactions known under normal conditions of use. Non self-ignitable. The mixture, which main ingredient is ammonium nitrate can react dangerously with strong alkali, strong acid.

10.4. Conditions to avoid

Avoid contact with combustible and reducing materials, pollution with incompatible substances. Do not expose to high temperatures, humidity. Keep away from sources of ignition - No smoking

10.5. Incompatible materials

Flammable substances, reducers, acids, petroleum products, strong bases, chlorates, chlorides, chromates, nitrites, permanganates, metals in powder form, base metals and alloys: copper, nickel, cobalt, zinc.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. When heated to melting or higher temperatures the product may decompose and emit ammonia fumes, toxic nitrogen oxides, sulphur oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity:
Not classified

LD50 oral:	Ammonium nitrate: 2950 mg/kg bw (rat; male/female)OECD 401 Hazleton (1981); Potassium sulphate >2000 mg/kg bw, (rat, male/female) OECD Test Guideline 425 Ammonium sulphate: 4250 mg/kg bw, (rat, male/female) OECD Test Guideline 401
LD50 dermal:	Ammonium nitrate: > 5000 mg/kg bw (rat; male/female)OECD 402 Merkel, D.J. (2000) Potassium sulphate

	>2000 mg/kg bw OECD 402, EC B.3, EPA and JMAFF guideline study in rats Ammonium sulphate: >2000 mg/kg bw, (rabbit, male, female) OECD Test Guideline 434
LC50 inhalation:	Ammonium nitrate: not relevant Potassium sulphate >1200 mg/m³ air (rat, male) (8 h) OECD Test Guideline 433 Ammonium sulphate: >1000 mg/m³ air (rat, male) (8 h) OECD Test Guideline 433
Skin corrosion / irritation:	Ammonium nitrate: Not irritating (rabbit) OECD 404 Jones, JR (1983) Potassium sulphate: not irritating to skin EU method B.46 (In Vitro Skin Irritation: Reconstructed Human Epidermis Model Test) Ammonium sulphate: not irritating to skin
Serious eye damage / irritation:	Ammonium nitrate: Irritating (rabbit) OECD 405 Clear irritation was observed with conjunctivae having scores above 2. However the effects were fully reversible within 7 -10 days. Irritation to the iris and cornea was limited (average scores 0.3), however the chemosis score had an average of 1. Anonymous (1998) Potassium sulphate: Not irritating (rabbit) OECD 405 (Acute Eye Irritation / Corrosion) 24, 48 and 72 hours However, Potassium sulphate containing 15% of KHSO4 Causes serious eye damage according to the CLP Directive H318 Cat.1 Ammonium sulphate: not irritating to eyes
Respiratory or skin sensitisation:	Ammonium nitrate: not sensitising (read-across) (mouse) OECD 429 EU B.42, EPA OPPTS 870.2600 Potassium sulphate: not sensitising (read-across)

	In a skin sensitisation study (LLNA) with magnesium sulphate itself, according to OECD 429, EU B.42 and OPPTS 870.2600 it was shown that the substance is not sensitising. Ammonium sulphate: no danger of sensitization
Germ cell mutagenicity:	Based on the available data, the classification criteria are not met for any substance of the mixture..
Carcinogenicity:	Based on the available data, the classification criteria are not met.
Reproductive toxicity:	Based on the available data, the classification criteria are not met.

Ammonium nitrate (CAS 6484-52-20)	
NOAEL, oral	>1500 mg/kg bw(read-across) (28 d): (rat, male/female OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) Product Safety Laboratories (2002)
NOAEL, oral	256 mg/kg bw/day (read-across) (52 and 104 weeks) (rat; male) OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) Ota Y et al, (2006)
NOAEC, inhalation	≥185 mg/m3 (rat, male) (2 weeks) Kema Mord (1978) Research Institute of Swedish National Defense (FOA) and the National Veterinary Institute (SVA), Stockholm, Sweden (cited in European Commission 2000).
Potassium sulphate (CAS 7778-80-5)	
NOAEL, oral	≥ 1500 mg/kg/day (rat, male, female) for reproduction/developmental toxicity, OECD Guideline 422
NOAEL, oral	256 mg/kg body weight OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) (rats/male, 2 years) read across with ammonium sulphate
Ammonium sulphate (CAS 7783-20-2) & Potassium sulphate (CAS 7778-80-5)	
NOAEL, oral	≥ 1500 mg/kg/day (rat, male, female) for reproduction/developmental toxicity, OECD Guideline 422
NOAEL, oral	256 mg/kg body weight OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) (rats/male, 2 years)
NOAEL, oral	284 mg/kg body weigh OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) (rats/female, 2 years)

Specific target organ toxicity – single exposure:	Based on the available data, the classification criteria are not met.
Specific target organ toxicity — repeated exposure:	Based on the available data, the classification criteria are not met.

Aspiration hazard	Based on the available data, the classification criteria are not met.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties:

The double-salt does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

11.2.2. Other information:

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hazardous to the aquatic environment: Not classified

Acute toxicity to fish

LC50:

Ammonium nitrate (CAS 6484-52-2)	species: *Cyprinus carpio* 447 mg/L (48 h) (freshwater, semistatic) Dabrowska, H. and Sikora, H. (1986)
Potassium sulphate (CAS 7778-80-5)	species: *fathead minnow fish* 680 mg/L (96 h) according to EPA guidelines
Ammonium sulphate (CAS 7783-20-2	53 mg/l (96 hours) *Oncorhynchus mykiss*, 57.2 mg/L *Mountain whitefish* (*Prosopium williamsoni)*; Review on Ammonia U.S. EPA (1999)

Chronic toxicity to fish

NOEC:	Ammonium sulphate EC10: 5.29 mg/L (30d) *Lepomis macrochirus;* Review on Ammonia U.S. EPA (1999)

Acute toxicity to aquatic invertebrates

EC50:

Ammonium nitrate (CAS 6484-52-2)	species: *Daphnia magna* 490 mg/L (read-across) (48 h) (Freshwater) Dowden, B. F. and Bennett H. J. (1965)
Potassium sulphate (CAS 7778-80-5)	species: *Daphnia magna* 720 mg/L (48 h) (Freshwater) according to EPA guidelines
Ammonium sulphate (CAS 7783-20-2)	169 mg/l (48 hours) OECD Guideline 202, *Daphnia magna*, 121.7 mg/L *Ceriodaphnia acanthina*, Review on Ammonia U.S. EPA (1999)

Chronic toxicity to aquatic invertebrates

NOEC:

Ammonium nitrate:
555 mg/L (7d) *Bullia digitalis (prosobranch gastropod)* salt water, Brown, A.C. and Currie, A.B., 1973

Ammonium sulphate EC10:
The EC10 of 3.12 mg/L for *Hyalella azteca* (Borgmann 1994) represents the most sensitive species mean chronic value for the assessment of chronic toxicity of ammonium to aquatic organisms and has consequently been used for the derivation of PNEC freshwater.

Toxicity to algae and other aquatic plants

EC50: NOEC:	

Ammonium nitrate (CAS 6484-52-2)	species: *several benthic diatoms (Navicula arenaria, Nitzschia dubiformis, Amphiprora cf paludosa,…)* > 1700 mg/L (read-across) (10 d) (saltwater) (growrate) Admiraal W. (1977)
Potassium sulphate (CAS 7778-80-5)	species: *Chlorella vulgaris* 2700 mg/l (18d) (Tam and Wong 1996) No reliable study with potassium sulphate is available. Based on a reliable study with ammonium sulphate and the results being confirmed by studies with potassium sulphate, the EC50 for freshwater algae is determined to be 2700 mg/L and the NOEC is ≥ 100 mg/L.
Ammonium sulphate (CAS 7783-20-2)	species: *Chlorella vulgaris* 2700 mg/l (18d) (Tam and Wong 1996)

Toxicity to aquatic microorganisms

EC50: NOEC:	

Ammonium nitrate (CAS 6484-52-2)	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) 180 min an EC50 > 1000 mg/L was derived for sodium nitrate. The NOEC was determined to be 180 mg/L.
Potassium sulphate (CAS 7778-80-5)	EC50 > 100 mg/l and the NOEC is 100 mg/L for all inorganic sulphates.
Ammonium sulphate (CAS 7783-20-2)	In a short term respiration test, performed similar to OECD guideline 209(BASF AG 1988) 30 min, freshwater EC50 of 1618 mg/L EC20 of 1050 mg/L

12.2. Persistence and degradability

Readily biodegradable:	Not applicable (inorganic)
Other relevant information:	In aqueous solution, all substances are dissociated

12.3. Bioaccumulative potential

Experimental BCF	Not applicable (low bioaccumulation potential)

Log Pow	Not applicable (inorganic)

12.4. Mobility in soil

Low adsorption potential

12.5. Results of PBT and vPvB assessment

The components of the formulations do not meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties

The double-salt does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

12.7. Other adverse effects

Other adverse effects:
No additional information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

This product and its packaging must be disposed of in a safe way. Generation of waste should be avoided or minimized wherever possible. 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 or local authority requirements.

13.1.1 Product

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer but processed in a suitable effluent treatment plant. Depending on the degree and nature of the contamination, dispose of it as fertilizer on the field, as a raw material or in an authorized waste facility. Incineration or landfill should only be considered when recycling is not feasible.
European waste catalogue (EWC) waste code: 02 01 09 agrochemical wastes (non-hazardous)

13.1.2 Packaging

Empty containers or liners may contain product residues. Packages should be emptied and can be recycled after thorough cleansing. If approved by local authorities, empty containers may be disposed of as non-hazardous material or returned for recycling.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number	Not a hazardous material with respect to these transportation regulations.
14.2. UN proper shipping name	Not a hazardous material with respect to these transportation regulations.
14.3. Transport hazard class(es)	Not a hazardous material with respect to these transportation regulations.
14.4. Packing group	Not a hazardous material with respect to these transportation regulations.
14.5. Environmental hazards	Not marine pollutant.

14.6. Special precautions for user

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7. Maritime transport in bulk according to IMO instruments

BCSN (Bulk Cargo Shipping Name) under IMSBC Code: AMMONIUM NITRATE BASED FERTILIZERS MHB
Group under IMSBC Code: B
Marine pollutant: No

SECTION 15: REGULATORY INFORMATION

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

15.1.1. EU-Regulations
REACH Regulation Annex XVII, Entry 58 Ammonium nitrate (AN) CAS No 6484-52-2 EC No 229-347-8

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
58	Ammonium nitrate

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain no substances listed on the REACH Candidate List (SVHS).

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain no substances listed on the REACH Annex XIV List (Authorisation List).

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP are a subject to Regulation (EU) No 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009 and repealing Regulation (EC) No 2003/2003.

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain substances (in particular, nitrates and phosphates) of the indicative list of the main pollutants (substances which contribute to eutrophication) in the Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy and the Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources are both important European Regulations regulating the emission and concentration of nitrate substances in the environment.

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain Ammonium nitrate, which is controlled under the Seveso III (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, amending and subsequently repealing Council Directive 96/82/EC).

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain no substance subject to Regulation (EU) No 1005/2009 Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain Ammonium Nitrate - the substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013:
Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

NPK(S) 28-0-5(6) SOP, NPK(S) 26-0-7(9) SOP contain no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations
German Water Hazard Classes (Wassergefahrdungsklassen):

Ammonium nitrate (CAS 6484-52-2)
Substance No: 212
WGK 1 - low hazard to waters
Potassium sulphate (CAS 7778-80-5)
Substance No: 255
WGK 1 - low hazard to waters
Ammonium sulphate (CAS 7783-20-2)
Substance No: 296
WGK 1 - low hazard to waters

15.2. Chemical safety assessment

A Chemical Safety Assessment has not been carried out for the double-salt itself.

SECTION 16: OTHER INFORMATION

16.1. Indication of changes:

Initial SDS was developed in accordance with Annex II to Regulation (EC) No 1907/2006, amended by COMMISSION REGULATION (EU) 2020/878 of 18 June 2020.

16.2. Abbreviations:

DMEL: Derived Minimal Effect Level
DNEL: Derived No-Effect Level.
PNEC: Predicted No-Effect Concentration.

NOAEC: No Observed Adverse Effect Concentration
NOAEL: No Observed Adverse Effect Level.
NOEC: No observed effect concentration.
LD50: Lethal Dose 50 %. The LD50 corresponds to the dose of a tested substance causing 50% lethality during a specified time interval.
LC50: Lethal Concentration 50 %. The LC50 corresponds to the concentration of a tested substance causing 50% lethality during a specified time interval.
EC50: Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50% changes in response (e.g. on growth) during a specified time interval.
BCF: Bioconcentration factor.
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioccumulative.
IMO: International Maritime Organisation
IMSBC: International Maritime Solid Bulk Cargoes

16.3. Key literature references and sources for data:
ECHA Guidance on the compilation of safety data sheets
ECHA C&L Inventory database.
Supplier's safety documents.
GESTIS International Limit Values

16.4. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:
Not applicable

16.5. Relevant H-statements (number and full text):
Not applicable.

16.6. Training advice:
Familiarize workers with recommended use, mandatory protective equipment, first aid, and forbidden product manipulation. Provide SDS to employees. Follow general rules on handling chemical substances and/or mixtures (double-salt).

16.7. Further information: Since the substance is not classified as hazardous, the generation of exposure scenario(s) for the identified uses is not required by Art. 14 of EC Regulation REACH.