SAFETY DATA SHEET

CAN+S N26+ 4S

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	05.03.2020

1.1. Product identifier

Product name	CAN+S N26+ 4S
Synonyms	Magni S
Information on the packaging	Size of packaging: 600 kg

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

Use of the substance / preparation	Fertiliser.
Main intended use	PC-FER-1 Fertilisers
Industrial use	Yes
Professional use	Yes
Consumer use	No

1.3. Details of the supplier of the safety data sheet

Company name	Belor Agro Oy
Office address	Salorankatu 5-7
Postcode	FI-24240
City	Salo
Country	Finland
Telephone number	+358 500 933 158
Email	info@beloragro.fi
Website	http://www.beloragro.fi
Enterprise No.	FI2132672-0

1.4. Emergency telephone number

Emergency telephone	Telephone number: 112 Description: Emergency telephone number (in Finland) Open 24 hours a day.

	Telephone number: +358 800 147 111 or +358 9 471 977 Description: Poison Information Centre (in Finland), P.O. Box 790 (Tukholmankatu 17), 00029 HUS Open 24 hours a day.
Identification, comments	Please contact the Emergency Centre in your own country, e.g. 112 in European Union countries.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Ox. Sol. 3; H272 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Ammonium nitrate
Signal word	Warning
Hazard statements	H272 May intensify fire; oxidiser. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep away from clothing and other combustable materials P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P264 Wash hands and exposed skin areas thoroughly after handling. P280 Wear protective gloves / protective clothing / eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice / attention. P337+P313 If eye irritation persists: Get medical advice / attention.

2.3. Other hazards

PBT / vPvB	For results of PBT and vPvB assessment, see point 12.5.
Other hazards	None reported.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Ammonium nitrate	CAS No.: 6484-52-2 EC No.: 229-347-8 REACH Reg. No.: 01-2119490981-27-XXXX	Ox. Sol. 3; H272 Eye Irrit. 2; H319	65 < 70 %	
Calcium carbonate	CAS No.: 471-34-1 EC No.: 207-439-9	CLP classification, notes: Not classified.	15 - 20 %	
Ammonium sulphate	CAS No.: 7783-20-2 EC No.: 231-984-1	CLP classification, notes: Not classified.	10 - 20 %	

Description of the mixture	The exact composition varies depending on the product.
Substance comments	The full text for all hazard statements are displayed in point 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	If the situation is unclear or symptoms persist, seek medical attention. Show this safety data sheet, product container or label to the doctor in attendance.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin contact	Remove contaminated clothing and shoes. Wash contaminated skin thoroughly with plenty of soap and water. Get medical attention if skin irritation persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open. Remove contact lenses, if present and easy to do, and continue rinsing. Get medical attention if eye irritation occurs.
Ingestion	Rinse mouth thoroughly. Do NOT induce vomiting. Get medical advice/attention. Give activated carbon, in order to reduce the resorption in the gastro-enteric tract. Never give anything by mouth to an unconscious person.

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

Acute symptoms and effects	Causes eye, skin and respiratory irritation. Ingestion may cause nausea and vomiting.
Delayed symptoms and effects	None known.

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

Other information	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water spray (fog).
Improper extinguishing media	Powder. Foam. Dry sand. Water spray.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	May intensify fire; oxidiser. Decomposition in > 210 ºC and in contact with sulphur, pyrite sulphur, acids, superphosphate, chloride of lime, metals in powder form.
Hazardous combustion products	During fire, toxic gases and vapours may be evolved. Nitrogen oxides (NOx). Sulphur oxides (SOx). Ammonia. Oxygen.

5.3. Advice for firefighters

Personal protective equipment	Wear appropriate protective equipment and self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Ensure adequate ventilation. Avoid generation and spreading of dust. Remove all sources of ignition.
Personal protection measures	Wear appropriate personal protective equipment.

6.2. Environmental precautions

Environmental precautionary measures	Avoid release into drains, sewers or waterways.

6.3. Methods and material for containment and cleaning up

Clean up	Pick up mechanically. Collect product with tested and approved industrial vacuum cleaner if necessary. Place in sealable containers for disposal.
Other information	Ventilate the area. Avoid generation and spreading of dust.

6.4. Reference to other sections

Other instructions	Safe handling: see point 7. Personal protective equipment: see point 8. Waste disposal: see point 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Ensure adequate ventilation. Avoid contact with skin, eyes, and clothing. Use appropriate personal protective equipment while handling the product (see point 8).

Protective safety measures

Safety measures to prevent fire	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Advice on general occupational hygiene	Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of workday. Take off contaminated clothing and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store away from all heat and ignition sources, and flammable substances.
Conditions to avoid	Keep away from moisture and water. For incompatible materials see point 10.5.

Conditions for safe storage

Technical measures and storage conditions	Store in a cool, dry, well-ventilated area. Keep storage area clean.
Packaging compatibilities	Suitable packaging materials and coatings: Polypropylene.

7.3. Specific end use(s)

Specific use(s)	The use stated in section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Dusts, respirable dust		Limit value (8 h) : 4 mg/m³	
Dusts, total inhalable dust		Limit value (8 h) : 10 mg/m³	
Control parameters comments	Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.		

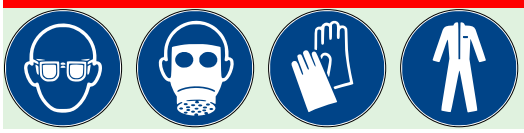
DNEL / PNEC

Substance	Ammonium nitrate
DNEL	**Group:** Professional **Route of exposure:** Long-term inhalation (systemic) **Value:** 37,6 mg/m³ **Comments:** Repeated dose toxicity **Group:** Professional **Route of exposure:** Long-term dermal (systemic) **Value:** 21,3 mg/kg bw/day **Comments:** Repeated dose toxicity **Group:** Consumer **Route of exposure:** Long-term inhalation (systemic) **Value:** 11,1 mg/m³ **Comments:** Repeated dose toxicity **Group:** Consumer **Route of exposure:** Long-term dermal (systemic) **Value:** 12,8 mg/kg bw/day **Comments:** Repeated dose toxicity **Group:** Consumer **Route of exposure:** Long-term oral (systemic) **Value:** 12,8 mg/kg bw/day **Comments:** Repeated dose toxicity
PNEC	**Route of exposure:** Freshwater **Value:** 0,45 mg/l **Route of exposure:** Saltwater

	Value: 0,045 mg/l **Route of exposure:** Water **Value:** 4,5 mg/l **Comments:** intermittent releases **Route of exposure:** Sewage treatment plant STP **Value:** 18 mg/l

8.2. Exposure controls

Safety signs



Precautionary measures to prevent exposure

Technical measures to prevent exposure	Ensure adequate ventilation. Use local exhaust ventilation if necessary.

Eye / face protection

Suitable eye protection	Use tight-fitting safety goggles (EN 166).

Hand protection

Suitable gloves type	Wear appropriate chemical resistant safety gloves (EN 374).
Suitable materials	Contact glove manufacturer for specific advice on glove selection.

Skin protection

Suitable protective clothing	Wear appropriate chemical-resistant, impervious protective clothing and footwear.
Recommended material(s)	Clothing: cotton. Boots: leather, rubber.

Respiratory protection

Respiratory protection necessary at	If it is not possible to reduce exposure levels to below exposure limit values by ventilation, use appropriate respirator.
Recommended type of equipment	Consult with respirator manufacturer to determine respirator selection, use, and limitations.
Recommended respiratory protection	Mask type: Use respiratory equipment with particle filter, type P2/P3. Reference to relevant standard: EN 143

Appropriate environmental exposure control

Environmental exposure controls	Prevent entry into drains, sewers and waterways.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Solid: granular
Colour	White. Grey.
Colour intensity	Light.
Odour	Odourless.
Odour limit	Comments: Not applicable.
pH	Status: In aqueous solution Value: 6 - 7,5 Concentration: 10 %
Melting point / melting range	Value: 165 °C Comments: 1013 hPa
Boiling point / boiling range	Comments: Decomposition: decomposes below the boiling point.
Flash point	Comments: Not applicable.
Evaporation rate	Comments: Unknown.
Flammability (solid, gas)	Not flammable.
Explosion limit	Comments: Not applicable.
Vapour pressure	Comments: Unknown.
Vapour density	Comments: Not applicable.
Relative density	Value: 1,05 Temperature: 20 °C
Solubility	Medium: Water Comments: Soluble. Medium: Water Value: 706 g/l Comments: Ammonium sulphate Medium: Water Value: 100 g/l Comments: Ammonium nitrate.
Partition coefficient: n-octanol/ water	Comments: Not applicable.
Spontaneous combustability	Comments: Not applicable.
Decomposition temperature	Value: > 210 °C
Viscosity	Comments: Not applicable.
Explosive properties	Not classified as explosive.
Oxidising properties	May cause or intensify fire; oxidiser.

9.2. Other information

Other physical and chemical properties

Comments	None reported.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not reactive under normal use and storage conditions.

10.2. Chemical stability

Stability	Chemically stable under normal storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts with strong alkalis and acids.

10.4. Conditions to avoid

Conditions to avoid	Keep away from sources of ignition. No smoking. Keep away from clothing. Keep away from incompatible materials.

10.5. Incompatible materials

Materials to avoid	Strong acids and bases. Oxidising agents. Metals in powder form, chlorates, chlorites, hypochlorites, sulfur, iron pyrite.

10.6. Hazardous decomposition products

Hazardous decomposition products	Nitrogen oxides (NOx). Ammonia or amines. Nitrous oxide. Sulphur oxides (SOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Ammonium nitrate
Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral **Value:** 2950 mg/kg **Animal test species:** Rat **Effect tested:** LD50 **Route of exposure:** Dermal **Method:** OECD 402 **Value:** ≥ 5000 mg/kg **Animal test species:** Rat **Effect tested:** LC50 **Route of exposure:** Inhalation. **Duration:** 4 hour(s) **Value:** 88,8 mg/l **Animal test species:** Rat
Substance	Ammonium sulphate
Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral

	Value: 3000 mg/kg **Animal test species:** Rat
Other toxicological data	There is no toxicological data available about the product as such. The product is not classified as acutely toxic.

Other information regarding health hazards

Assessment of skin corrosion / irritation, classification	Causes skin irritation.
Assessment of eye damage or irritation, classification	Causes serious eye irritation.
Sensitisation	The product is not classified as a respiratory or skin sensitiser.
Mutagenicity	The product is not classified as a mutagen.
Carcinogenicity, other information	The product is not classified as a carcinogen.
Reproductive toxicity	The product is not classified as toxic to reproduction.
Assessment of specific target organ toxicity - single exposure, classification	May cause respiratory irritation.
Assessment of specific target organ toxicity - repeated exposure, classification	The product is not classified as toxic to specific target organs at repeated exposure.
Assessment of aspiration hazard, classification	The product is not classified as an aspiration hazard.

Symptoms of exposure

In case of ingestion	May cause nausea and vomiting.
In case of skin contact	May cause irritation.
In case of inhalation	May cause respiratory irritation: Difficulty in breathing. Coughing.
In case of eye contact	Irritating to eyes.
Other information	No other health effects reported.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Ammonium nitrate
Aquatic toxicity, fish	**Toxicity type:** Acute **Value:** 447 mg/l **Effect dose concentration :** LC50 **Test duration:** 48 hour(s) **Species:** Cyprinus carpio **Method:** freshwater, static system
Substance	Ammonium sulphate
Aquatic toxicity, fish	**Toxicity type:** Acute **Value:** 126 mg/kg **Effect dose concentration :** LC50

	Test duration: 96 hour(s) **Species:** Poecilia reticulata
Substance	Ammonium nitrate
Aquatic toxicity, algae	**Toxicity type:** Acute **Value:** ≥ 1700 mg/l **Effect dose concentration :** EC50 **Test duration:** 10 day(s) **Method:** saltwater, growth rate
Substance	Ammonium nitrate
Aquatic toxicity, crustacean	**Toxicity type:** Acute **Value:** 490 mg/l **Effect dose concentration :** EC50 **Test duration:** 48 hour(s) **Species:** Daphnia **Method:** freshwater
Substance	Ammonium sulphate
Aquatic toxicity, crustacean	**Toxicity type:** Acute **Value:** 292 mg/kg **Effect dose concentration :** LC50 **Test duration:** 48 hour(s) **Species:** Daphnia magna
Ecotoxicity	The product is not classified as hazardous to the environment. Prevent entry into drains, sewers or waterways.

12.2. Persistence and degradability

Persistence and degradability description/evaluation	Not relevant for inorganic substances. In aqueous solution, the substance is dissociated.

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	Not relevant for inorganic substances. Unlikely to bioaccumulate.

12.4. Mobility in soil

Mobility	Low adsorption potential.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not relevant for inorganic substances.

12.6. Other adverse effects

Additional ecological information	None reported.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the contaminated packaging	After usage, empty the packing completely.
Other information	Dispose of in compliance with local and national regulations.

SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN	2067
IMDG	2067
ICAO/IATA	2067

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	AMMONIUM NITRATE BASED FERTILIZER
ADR/RID/ADN	AMMONIUM NITRATE BASED FERTILIZER
IMDG	AMMONIUM NITRATE BASED FERTILIZER
ICAO/IATA	AMMONIUM NITRATE BASED FERTILIZER

14.3. Transport hazard class(es)

ADR/RID/ADN	5.1
Classificaton code ADR/RID/ADN	O2
IMDG	5.1
ICAO/IATA	5.1

14.4. Packing group

ADR/RID/ADN	III
IMDG	III
ICAO/IATA	III

14.5. Environmental hazards

IMDG Marine pollutant	No.

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Transport in bulk (yes/no)	No

Additional information

Hazard label ADR/RID/ADN	5.1
Hazard label IMDG	5.1
Hazard label ICAO/IATA	5.1

ADR/RID Other information

Tunnel restriction code	E
Transport category	3
Hazard No.	50

IMDG Other information

EmS	F-H, S-Q

SECTION 15: Regulatory information

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

Restriction of chemicals according to Annex XVII (REACH)	Entry: 58 Ammonium nitrate (CAS no.: 6484-52-2)
Legislation and regulations	Regulation (EU) 2019/1009 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.

15.2. Chemical safety assessment

Chemical safety assessment performed	No
Chemical safety assessment	Chemical Safety Assessment has been carried out for the substance: Ammonium nitrate

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H272 May intensify fire; oxidiser. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
CLP classification, notes	The classification is based on the bridging principle: dilution in accordance with Regulation (EC) No 1272/2008 [CLP / GHS].
Training advice	Read safety data sheet.
Key literature references and sources for data	Product specifications by manufacturer SDSs for product components EH40/2005 Workplace exposure limits (3rd ed, 2018)
Abbreviations and acronyms used	DNEL: Derived No-Effect Level EC50: Effective concentration: concentration which kills or immobilises 50 % of exposed organisms LC50: Lethal concentration 50 % (median lethal concentration): concentration which kills 50 % of exposed organisms LD50: Lethal dose 50 % (median lethal dose): dose which kills 50 % of exposed organisms PNEC: Predicted No-Effect Concentration TWA: Time-weighted average

Version	1
Prepared by	Sweco AB
Comments	The information of this safety data sheet is based on existing public information sources, such as current legislation, available at the time of publication of the completed safety data sheet, and information on the Customer's products that has been provided by the Customer to Sweco. The Customer is responsible that the information provided to Sweco is accurate and up to date.