

Calcium Ammonium Nitrate 27 N

Version: 3.0

Revision Date: 19.09.2012

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Calcium Ammonium Nitrate 27 N

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

1.3 Details of the supplier of the safety data sheet

Company : EuroChem Agro GmbH
Reichskanzler-Müller-Str. 23
D-68165 Mannheim
Germany
Telephone : +49 621 87209-0
Telefax : +49 621 87209-101
E-mail address : info@eurochemagro.com

1.4 Emergency telephone number

BASF fire brigade Ludwigshafen
Telephone: +49 621 60 43333

2. Hazards identification

2.1 Classification of the substance or mixture

Classification(67/548/EEC,1999/45/EC)

2.2 Label elements

Labelling(REGULATION (EC) No 1272/2008)

Labelling according to EC Directives ()

Further information : Not subject to labelling in accordance with EEC Directives.

2.3 Other hazards

No particular dangers occur if the regulation/notes for storage and handling are observed.

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Straight Nitrogen fertilizer contains:
Ammonium Nitrate
Calcium carbonate
possibly Dolomite

Hazardous components

Chemical Name	CAS-No. EC-No.	Classification (67/548/EEC)	Classification (REGULATION (EC))	Concentration [%]
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	Registration number		No 1272/2008)	
Ammonium Nitrate	6484-52-2 229-347-8 01- 2119490981- 27-0050	O; R 8 Xi; R36	Ox. Sol. 3; H272 Eye Irrit. 2; H319	>= 70 - <= 80

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

- If inhaled : On inhalation of decomposition products: Keep person calm, have individual removed to fresh air, seek medical help. If danger of loss of consciousness, place person in recovery position and transport accordingly. Perform artificial respiration if necessary.
On inhalation of fertilizer dusts: Fresh air, if necessary medical assistance.
- In case of skin contact : Wash off with soap and water.
- In case of eye contact : Wash affected eyes for at least 15 minutes under running water with eyelids held open.
- If swallowed : Immediately rinse mouth and then drink plenty of water, seek medical assistance.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

5. Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : When decomposing product is handled:
Water (attention, larger quantities are necessary to stop the thermic decomposition)
- Unsuitable extinguishing media : Sand
Foam
Carbon dioxide (CO₂)
Dry chemical

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Can decompose at above 170 °C. Thermal decomposition products: Nitrogen monoxide, nitrogen dioxide, dinitrogen oxide, ammonia.

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Fire residues and contaminated fire extinguishing water must

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be disposed of in accordance with local regulations.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental precautions

Environmental precautions : Do not let product enter drains, surface water or subsoil water. Retain and dispose of polluted washing water according to regulations.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment. Rinse off remainders with water.

6.4 Reference to other sections

7. Handling and storage

7.1 Precautions for safe handling

Advice on protection against fire and explosion : Keep away from heat and sources of ignition. Keep away from combustible materials. Do not smoke. The product is incombustible. However, it can lower the ignition temperature of combustible substances.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Protect against contamination. Protect against humidity (product is hygroscopic and tends to cake or disintegrate) Keep away from direct sunlight. Protect against heat.

Further information on storage conditions :

Advice on common storage : When stored loosely do not mix with other fertilizers. Store well away from other substances, particularly from organic materials.

Other data : If inappropriately or improperly stored caking or disintegration possible.

7.3 Specific end use(s)

8. Exposure controls/personal protection

8.1 Control parameters

DNEL

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Ammonium Nitrate	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Specific effects Exposure time: 1 d Value: 37,6 mg/m3
		End Use: Workers Exposure routes: Skin contact Potential health effects: Specific effects Exposure time: 1 d Value: 21,3 mg/kg
		End Use: Consumers Exposure routes: Ingestion Potential health effects: Specific effects Exposure time: 1 d Value: 12,8 mg/kg
		End Use: Consumers Exposure routes: Ingestion Potential health effects: Specific effects Exposure time: 1 d Value: 12,8 mg/kg
		End Use: Consumers Exposure routes: Inhalation Potential health effects: Specific effects Exposure time: 1 d Value: 11,1 mg/m3

PNEC Ammonium Nitrate	:	Fresh water Value: 0,45 mg/l
		Marine water Value: 0,045 mg/l
		Ceiling Limit Value Value: 4,5 mg/l

8.2 Exposure controls

Personal protective equipment

Respiratory protection	:	If breathable dust is formed: Dust mask.
Hygiene measures	:	At the end of the shift skin should be cleaned and skincare product applied.

Environmental exposure controls

General advice	:	Do not let product enter drains, surface water or subsoil water. Retain and dispose of polluted washing water according to regulations.
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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: granular
Colour	: white or grey
Odour	: almost odourless
pH	: ca. 7, (100 g/l, 20°C)
Water solubility	: mostly soluble
Thermal decomposition	: Decomposition above 170 °C., To avoid thermal decomposition, do not overheat., The product is not capable of self-sustaining progressive thermal decomposition (UN-Test S1).

9.2 Other information

	: Decomposition above 170 °C.
Bulk density	: ca. 1.000 kg/m ³

10. Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

10.3 Possibility of hazardous reactions

Hazardous reactions	: Ammonia in contact with alkaline solutions. The formation of gaseous decomposition products builds up pressure in tightly closed containers.
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10.4 Conditions to avoid

10.5 Incompatible materials

Materials to avoid	: Sulphur, chloride, acid or alkaline reacting substances, flammable oxidizable substances, nitrites, metallic salts, metallic powder.
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10.6 Hazardous decomposition products

Hazardous decomposition products	: At temperatures above 170 °C, nitrogen monoxide, nitrogen dioxide, dinitrogen oxide and ammonia can be released.
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11. Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity	: LD50: > 2.000 mg/kg, rat, The product was not tested. The statement was derived from products of similar structure and composition.
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Components:

Ammonium Nitrate :

Acute oral toxicity	:	LD50: > 2.950 mg/kg, rat, OECD Test Guideline 401
Acute inhalation toxicity	:	> 88,8 mg/l, No information available., Not relevant because of low vapour pressure., Not relevant because of low dust formation.
Acute dermal toxicity	:	LD50: > 5.000 mg/kg, rat, OECD Test Guideline 402
Skin corrosion/irritation	:	rabbit, Result: non-irritant, OECD Test Guideline 404
Serious eye damage/eye irritation	:	rabbit, Result: Irritant, OECD Test Guideline 405
Respiratory or skin sensitization	:	Result: Does not cause skin sensitization.
Germ cell mutagenicity	:	
Genotoxicity in vitro	:	Result: negative, OECD Test Guideline 471
STOT - repeated exposure	:	rat, Oral, Exposure time: 28 d, NOAEL: > 1.500 mg/kg
STOT - repeated exposure	:	rat, Oral, Exposure time: 52 w, NOAEL: = 256 mg/kg, OECD Test Guideline 453
STOT - repeated exposure	:	rat, by inhalation, Exposure time: 2 w, NOAEL: >= 185 mg/kg, Repeated Dose Inhalation Toxicity: 28-day or 14-day Study.

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50: > 100 mg/l, 96 h, various species

Components:

Ammonium Nitrate :

Toxicity to fish	:	LC50: > 100 mg/l, 96 h, various species
Toxicity to daphnia and other aquatic invertebrates	:	EC50: 490 mg/l
	:	LC50: 490 mg/l
Toxicity to algae	:	EC50: 1.700 mg/l, other aquatic plant

12.2 Persistence and degradability

Components:

Ammonium Nitrate :

Biodegradability :
The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Components:

Ammonium Nitrate :

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Bioaccumulation : Bioaccumulation is unlikely.

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

Product:

Additional ecological information : With high probability acutely not harmful to water organisms.,
With proper entering of low concentrations in adapted biological purification plants, disturbances of the degrading activity of bioactive sludge are not to be expected.

13. Disposal considerations

13.1 Waste treatment methods

Product : Contact manufacturer.
Examine usability in agriculture.

Contaminated packaging : Contaminated packages should be emptied as far as possible and can be recycled after thorough cleansing.

14. Transport information

14.1 Land transport

ADR

Remarks : No dangerous product according to the rules for road transport

14.2 Sea transport

ADNR

Remarks : No dangerous product according to the rules of barge transport

IMDG

Remarks : No dangerous product according to the rules of vessel transport

14.3 Air transport

IATA-DGR

Remarks : No dangerous product according to the rules of air transport

14.4 Special precautions for user

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

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

Other regulations : The national authority permits and storage regulations must be observed.

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15.2 Chemical Safety Assessment

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R 8	Contact with combustible material may cause fire.
R36	Irritating to eyes.

Full text of H-Statements referred to under sections 2 and 3.

H272	May intensify fire; oxidiser.
H319	Causes serious eye irritation.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.