

Entec[®] 26+13S

Version: 3.0

Revision Date: 26.09.2012

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	Entec 26
Chemical Formula:	Not Applicable
Product Code:	4570000
Recommended Use:	Fertiliser
Company Identification: Address:	Ravensdown Fertiliser Co-operative Limited Level 1, 32 Oxford Terrace PO Box 1049 Christchurch
Customer Centre:	0800 100 123
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Telephone Number:	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
Transport Emergency Phone:	111 - tell operator what service is needed: Fire, Ambulance, Police

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.

Further information : German "Hazardous Substances" legislation (Gefahrstoffverordnung) appendix III, No. 6 (Ammonium Nitrate group C IV)
TRGS 511 'Ammonium nitrate'

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
Ammonium Sulphate

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possibly trace element combination
1H-Pyrazole, 3,4-dimethyl-,phosphate (1:1)

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
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	>= 10 - <= 45

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

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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 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.
- 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

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DNEL

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	: varying, according to dye or colour of the basic materials.
Odour	: almost odourless
pH	: ca. 4, (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	: Inflammable, oxidizable substances, sourly reacting substances, alkalinely reacting substances.
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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: 422 mg/l, 48 h, various species
Toxicity to daphnia and other aquatic invertebrates	: EC50: 555 mg/l, 48 h, Daphnia
Toxicity to algae	: No observed effect concentration: 83 mg/l, 168 h, green algae, no data available
Toxicity to bacteria	: EC20: > 100 mg/l, 0,5 h, activated sludge, no data available

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 :

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

12.3 Bioaccumulative potential

Components:

Ammonium Nitrate :

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 : Disposal via sewage water treatment plants may cause impairment of the nitrification activity of the activated sludge., With high probability acutely not harmful to water organisms.

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

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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.

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.

Further information

Other information : Entire wording of the danger symbols and R-phrases from chapter 3:

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.