

SAFETY DATA SHEET



according to EC Directive 2001/58/EC

Date of issue: 30-11-2004

revised on: 07-04-2008

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Trade name: PLANTACOTE® Plus 4M
Product-No.: 52205

1	Company				
	Manufacturer/Supplier:	AGLUKON Spezialdünger GmbH & Co. KG	Telephone:	+49 (0)211 5064-0	
	Address:	Heerder Landstraße 199 40549 Düsseldorf, Germany	Telefax:	+49 (0)211 5064-247	
	Informing department:	See chapter 16			
Emergency telephone (D/Berlin):		Telephone No.:	+49 (0)30 19240	(Day and Night)	

2	Composition/Information on Ingredients					
	Preparation:	NPK-fertilizer with magnesium 14-9-15-(2MgO) and with micronutrients, coated				
	Description:	Solid granulated mixture of mineral salts, coated with polymer resin.				
	Use:	Plant nutrition, slow release fertilizer				
	<u>Harmful components:</u>					
	<u>Marking</u>	<u>EC-No.</u>	<u>CAS-No.</u>	<u>Content %</u>	<u>Danger symbol</u>	<u>R-phrases</u>
	Ammonium nitrate	229-347-8	6484-52-2	10 – 45	O Oxidizing	8-9
	Additional information:	Full text of R-Phrases: see under section 16.				

3	Hazards Identification	
	Hazards designation	None. No hazardous product as specified in Directive 67/548/EEC.
	Particular hazards (R-phrases):	None
	Special hazard information:	In event of fire the preparation has no property of self-supporting, increasing thermic decomposition, but the formation of nitrous gases is possible.
	Relevant information:	The regulations and requirements of the Directive 96/82/EC (Seveso II) and the Directive 2003/105/EC do not apply to the preparation.
	Harmful effects/symptoms:	None

4	First-Aid Measures	
	General hints:	Remove soiled clothes.
	after inhalation of dust:	Take out to the fresh air, rest quiet and warm. Medical assistance is necessary in case of difficulty in breathing.
	after skin contact:	Immediately wash affected skin regions thoroughly with soap and plenty of water. Summon doctor if necessary.
	after eyes contact:	Thoroughly rinse eyes with lids wide apart under running water (protect the uninjured eye, remove contact lenses). Summon eye specialist if necessary.
	after ingestion:	Immediately rinse the mouth with water, then drink a lot of water. Consult the doctor in case of persistent trouble.

5	Fire-Fighting Measures	
	Suitable extinguishing media:	Water
	Unsuitable extinguishing media:	Do not use chemical extinguishers or foams or attempt to smother the fire with steam or sand.
	Special risks:	The material itself is harmless and hardly inflammable. Ambient fire may liberate hazardous vapours. If larger quantities of the product are on fire, the formation of nitrous gases, ammonia, sulfuric acid gases and phosphoric acid gases is possible.
	Special equipment to protect firefighters:	Do not stay in dangerous zone without suitable protecting clothes and selfcontained breathing apparatus.
	Other information:	Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

6	Accidental Release Measures	
	Personal precautions:	Avoid generation of dusts, do not inhale dusts. Avoid substance contact. Wear closed working clothes, and in event of dust wear protecting glasses and hand protection. Remove soiled clothes. See section 8.
	Specific hazards:	The material itself is harmless and hardly inflammable. Ambient fire may liberate hazardous vapours. If larger quantities of the product are on fire, the formation of nitrous gases, ammonia, sulfuric acid gases and phosphoric acid gases is possible.
	Special equipment to protect firefighters:	Do not stay in dangerous zone without suitable protecting clothes and selfcontained breathing apparatus.
	Other information:	Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.
	Environmental precautions:	Ensure that the product does not reach the ground-water, water bodies or the

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Methods for cleaning up/taking up: drainage system.
Take up the product mechanically. Sweep or vacuum material when possible and shovel into a waste container.
Disposal of contaminated material as waste according to section 13.

7 Handling and Storage

Handling

Advice as to safe handling: Protect the product from weather factors, high humidity, direct solar radiation, heat up and impurity.

For working use only well ventilated areas.

Wear suitable protecting clothes. Avoid product contact and formation of dust. Do not inhale dusts. In event of dust wear respiratory protection, safety glasses and gloves.

Remove soiled and soaked clothes and wash hands and face after work (see section 8).

At the stockrooms no smoking and no dealing with fire or open light.

No admittance to the stockrooms except on business.

Advice to prevent fire and explosion: Keep away from hot surfaces and sources of ignition - refrain from smoking.

The material itself is harmless and hardly inflammable. Ambient fire may liberate hazardous vapours. If larger quantities of the product are on fire, the formation of nitrous gases, ammonia, sulfuric acid gases and phosphoric acid gases is possible. Do not stay in dangerous zone without suitable protecting clothes and self-contained breathing apparatus.

Storage

Stockrooms and containers required:

It is recommended to design stockrooms so that the product is well-protected from weather factors, humidity, solar radiation, heat up and impurities.

Keep stockrooms free from fireplaces and other ignition sources.

Keep containers densely closed and store in a cool dry place.

To fight a fire and decomposition keep care of a sufficient water supply.

Ensure high standard of housekeeping in the storage area.

Storage together with other materials:

Do not store together with:

- strong alkaline materials,

- strong acid materials,

- combustible materials,

- substances, which form perilous reactions with ammonium nitrate.

Do not store together with food and luxury food, beverage and animal feed.

More information see section 10.

8 Exposure Controls / Personal Protection

Exposure limits

According to the national German regulations, the preparation contains no constituents with occupational exposure limits resp. biological occupational exposure limits requiring monitoring.

Personal protective equipment

Respiratory protection: Not required. Respiratory protection necessary at dust formation.

Hand protection: Chemical resistance rubber or plastic gloves.

Eye protection: In event of dust wear safety glasses with side shields or goggles.

Skin and body protection: Closed working clothes

Preventive and hygiene measures: Do not eat and drink at work. Remove immediately soiled and soaked clothes.

Wash hands and face after work.

9 Physical and Chemical Properties

Appearance

Form/physical state: Solid granules

Colour: Beige to light brown

Odour: Product-specific

Data relevant to safety

pH (original state): Not applicable.

Change in physical state: > 180° C decomposition.

Boiling point/-range: Not applicable. °C

Melting point/-range: Not determined. °C

Flash point: Not applicable. °C

Inflammability: Not determined.

Ignition temperature: Not determined. °C

Method:

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Self-ignition:	The product is not spontaneously inflammable.	
Fire-promotive properties:	Not determined.	
Explosion hazard:	The product has no explosion hazardous properties.	
Vapor pressure (at °C):	Not determined.	hPa
Density (at 20°C):	approx. 1	g/cm ³
Solubility in water (at 20°C):	Partly soluble	mg/l

10 Stability and Reactivity

Conditions to avoid: High humidity, direct solar radiation, temperatures above +130°C.
Materials to avoid: Alkalis, calcinated lime, slaked lime, calcium cyanamide, cement, all acids, chlorate, chlorite, hypochloride, nitrite, chlorinated herbicides, coal dust, sulfur, oil, fuel, painting material, lacquer, organic peroxide, metal powder, grain, paper, textiles, waste wool, wood, wood fiber, hay, straw, cardboards, combustible packing materials.
Hazardous decomposition products: Reacts with alkalis setting ammonia free.
Thermic decomposition products: If larger quantities of the product are on fire, the formation of nitrous gases, ammonia, sulfuric acid gases and phosphoric acid gases is possible.
Further information: No decomposition if correctly used.
The product is stable under normal conditions.

11 Toxicological Information

Toxicological tests

Acute toxicity Toxicological data are not available.
Toxicological effects are unknown.
Property that must be anticipated on the basis with comparable preparations:
LD50 (oral, rat): >10.000 mg/kg
The following applies to ammonium nitrate: LD50 (oral, rat): 4820 mg/kg.
The following applies to potassium nitrate: LD50 (oral, rat): 3750 mg/kg .
Owing to the time-delayed solubility of the fertilizer over several months, an acute toxic effect can be excluded.

Further toxicological information

After inhalation of dust: Slight irritations of the mucous membranes and coughing.
Acute inhalation of respirable dust may cause irritation of the upper respiratory tract and lungs.
After skin contact (dust): Slight irritations.
After eye contact (dust): Slight irritations.
After uptake of large quantities: Diarrhoea, disturbed electrolyte balance.
The following applies to nitrates in general:
Methaemoglobinaemia after the uptake of large quantities.

Further data

Further hazardous properties cannot be excluded.
The product should be handled with the care usual when dealing with chemicals.
No toxicological effects are to be expected when the product is handled and used with due care and attention.

12 Ecological Information

General information: Fertilizer material.
Ensure that the product does not reach the ground-water, water bodies or the drainage system.
Further ecologic data: Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of drinking-water supplies.
The following applies to ammonium ions in general:
biological effects: fish: toxic as from 0.3 mg/l ;
animal nourishment for fish: toxic as from 0.3 mg/l .
No ecological problems are to be expected when the product is handled and used with due care and attention.

13 Disposal Considerations

Product

Recommendation: Disposal of product rests in accordance with the official local disposal regulations.
According to european waste regulations:
Waste Code (EWC-No.): 061002

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Waste Name: Wastes from the manufacture, formulation, supply and use of nitrogen chemicals, nitrogen chemical processes and fertilizer manufacture.
Wastes containing dangerous substances.

Contaminated packaging

Recommendation: Disposal of contaminated packages in accordance with the local official disposal regulations.

Cleaners: Water

14 Transport Information

Surface transport: No hazardous good.

River transport: No hazardous good.

Sea navigation transport: No hazardous good.

Air transport: No hazardous good.

Further information: Harmless mixture according to trough test: BAM (Federal Institute for Testing of Material) BAM-Test report II.2-842/96
The transport regulations are cited according to international regulations and in the form applicable in Germany (GGVS/GGVE). Possible national deviations in other countries are not considered.

15 Regulatory Information

EC Directives

Directive 67/548/EEC

Danger symbol and designation:

No labelling duty according to the EC-Hazardous Materials Regulation.

contains R-phrases: None

contains S-phrases: None

Directive 96/82/EC and Directive 2003/105/EC (Seveso II)

None

National regulations Germany

Particular labelling of certain preparations:

According to the Hazardous Materials Regulation (Germany): „Fertiliser with ammonium nitrate, Group C“ (BAM-test report II.2-842/96)

Employment limitations:

None

Interference regulations – BimSchV:

None

Classification according to VbF:

None

Technical Regulations Air:

None

Technical Regulations

Hazardous Materials:

TRGS 511 – “Ammonium nitrate and preparations containing ammonium nitrate”

Storage class according to

VCI-concept:

5.1C Oxidizing substances.

Water pollution class:

WGK 1 - slightly water polluting preparation

(own classification)

Further regulations, limitations and prohibition regulations:

None

16 Other information

Relevant R-Phrases (Number and full text)

For section 2:

R 8

Contact with combustible material may cause fire.

R 9

Explosive when mixed with combustible material.

Reason for alteration

General update.

Further information:

Data sheet writing department:

Development Special Fertilizers

Contact persons:

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The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.