

SAFETY DATA SHEET

EKOTE COATED NPK+TE

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

1.1 Product identifier

Identification of the substance or preparation

MSDS Ref. No.:	N-005 (EN)
Product name:	Ekote Coated NPK+TE:
	See label of products for SDS number
Fertilizer type:	Fertilizer (AN-Urea based)

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

Identified use:	Granulated fertilizer for horticulture and agriculture
Uses advised against:	None identified

1.3 details of the supplier of the safety data sheet (SDS)

Company identification	Ekompany International B.V. Verloren van Themaatweg 2A 6121 RG Born The Netherlands T: +31 46 727 10 00
E-mail address of the responsible for this SDS:	contact@ekompany.eu

1.4 Emergency telephone number

Emergency telephone number:	+ 31 6 101 40 351 (only intended to inform professionals in acute poisonings)
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2. Hazards identification

2.1 Classification of the substance or preparation

Product definition	Preparation
Classification according to regulation EC nr 67/548 (DSD) or EC 1999/45	
Classification	Not classified
Classification according to regulation EC nr 1272/2008 (CLP/GHS)	
Classification	Not classified

See section 11 for more information on health effects and symptoms.
See section 16 for the full text of the R phrases or H statements declared above.

2.2 Label elements

Hazard pictograms:	None
Signal words:	None
Hazard statements:	None
Precautionary statements	
-Supplemental label elements	Safety Data Sheet available for professional user on request.
-EU regulation EC1907/2006 (REACH) Annex XVII (restrictions on manufacture, placing on the market and use of certain	

dangerous substances, mixtures and articles)	None
Special packaging requirements	
-Containers to be fitted with child resistant fastenings:	Not applicable
-Tactile warning of danger:	Not applicable

2.3 Other hazards

Substance meets criteria for PBT according to regulation EC nr 1907/2006, Annex XIII:

Not applicable

Substance meets the criteria for vPvB according to regulation EC nr 1907/2006, Annex XIII:

Not applicable

Other hazards which do not result in classification:

Product forms slippery surface
when combined with water**3. Composition/information on ingredients**

Substance/preparation:					Preparation	
Substance name	Contents	CAS-no.	EC-no.	Annex-no.	REACH	Classification
Ammonium nitrate [1]	Between 1 and 70 %	6484-52-2	229-347-8		01-2119490981-27-XXXX	O; R8 Xi; R36 Ox. Liq. 3;H272 Eye Irrit. 2;H319
Urea	Between 1-60%	57-13-6	200-315-5		01-2119463277-33	Not classified. (DSD/DPD) Not classified. (GHS)
Potassium sulfate	Between 1 and 60 %	7778-80-5	231-915-5		01-2119489441-34-0015; 0058	Not classified. (DSD/DPD) Not classified. (GHS)
Monoammonium-Phosphate (MAP)	Between 1 and 40 %	7722-76-1	231-764-5		01-2119488166-29-0025; 0049	Not classified. (DSD/DPD) Not classified. (GHS)
Calcium sulfate	Between 1 and 35 %	7778-18-9	231-900-3		01-2119444918-26-0097; 0169	Not classified. (DSD/DPD) Not classified. (GHS)
Diammonium phosphate (DAP)	Between 1 and 35 %	7783-28-0 23	1-987-8		01-2119490974-22-XXXX; 0046	Not classified. (DSD/DPD) Not classified. (GHS)
Ammonium sulphate	Between 1 and 30 %	7783-20-2	231-984-1		01-2119455044-46-0064; 0101	Not classified. (DSD/DPD) Not classified. (GHS)
Potassium nitrate [1]	Between 1 and 30 %	7757-79-1	231-818-8		01-2119488224-35-0018; 0026	O; R8 Ox. Sol. 3;H272
Calcium bis (dihydrogen orthophosphate)	Between 1 and 20 %	7758-23-8	231-837-1		01-2119490065-39-0003; 0010	Xi; R41 Eye Dam. 1;H318
Magnesium oxide	Between 0,01 and 7 %	1309-48-4	215-171-9		EXEMPTED	Not classified. (DSD/DPD) Not classified. (GHS)
Magnesium sulfate (*)	Between 0,1 and 25%	7487-88-9	231-298-2		EXEMPTED	Not classified. (DSD/DPD) Not classified. (GHS)
Calcium hydrogenorthophosphate	Between 1 and 5 %	7757-93-9	231-826-1		01-2119490064-41-0015; 0020	Xi; R41 Eye Dam. 1;H318
Monopotassium phosphate (MKP)	Between 1 and 5 %	7778-77-0	231-913-4		01-2119490224-41-0016;0027	Not classified. (DSD/DPD) Not classified. (GHS)
Disodium tetraborate pentahydrate	Between 0,01 and 5 %	12179-04-3	215-540-4	005-011-02-9	01-2119490790-32-XXXX	Repr. Cat. 2; R60 Repr. Cat. 2; R61 Repr. 1B;H360F Repr. 1B;H360D
Iron sulphate	Between 0,01 and 2 %	7782-63-0	231-753-5		01-2119513203-57-XXXX	Xn; R22 Xi; R36/38 Acute Tox. 4 (Oral); H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315
Manganese sulphate	Between 0,01 and 1 %	10034-96-5	232-089-9		025-003-00-4 01-2119456624-35-XXXX	Xn; R48/20/22 Xi; R41 N; R51-53 Eye Dam. 1;H318 STOT RE 2;H373 Aquatic Chronic 2;H411
Zinc sulphate	Between 0,01 and 0,25 %	7446-19-7	231-793-3		030-006-00-9 01-2119474684-27-XXXX	Xn; R22 Xi; R41 N; R50-53 Eye Dam. 1;H318 Acute Tox. 4 (Oral);H302 Aquatic

						Acute 1;H400 Aquatic Chronic 1;H410
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Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Components: Within the present knowledge of the supplier, this product is not hazardous but contains hazardous components in quantities requiring reporting in this section, in accordance with EU regulations or national regulations.

Composition: Mixture containing above mentioned component(s) plus a polymer which is exempt from REACH classification Regulation no. EC1907/2006 as coating component.
Mixtures containing less than 80% ammonium nitrate are not classified Irritating to eyes (Fertilizers Europe study July 2011). Nitrogen (and magnesium if present in the product) neutralizes free acidity of superphosphates (calcium phosphates), the fertilizer is then not classified Irritating to eyes (Fertilizers Europe study Dec. 2014).
The presence of magnesium and micronutrients is indicated on the product label.

4. First-aid measures

4.1 Description of first aid measures

- Inhalation:** Avoid breathing dust. If inhaled, remove to fresh air.
- Skin contact:** Avoid prolonged or repeated contact with skin. After handling, always wash hands thoroughly with soap and water. Get medical attention if irritation develops. Remove contaminated clothing.
- Eye contact:** In case of contact with eyes, rinse immediately with a copious amount of water. Get medical attention if irritation develops.
- Ingestion:** If large quantities of this material are swallowed, call a physician immediately. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. Give water to drink if victim is completely conscious/alert.
- Protection of first-aiders:** Low hazard for usual industrial or commercial handling.

4.2 Most important symptoms and effects, both acute and delayed

- Inhalation:** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact:** No significant effects or critical hazards.
- Eye contact:** Dust from this product may cause eye irritation.
- Ingestion:** Health hazard if ingested in large quantities (gastro intestinal disorders). In extreme cases, formation of methaemoglobin – “Blue baby syndrome” - and cyanosis may occur.

4.3 Indication of any immediate medical attention and special treatment needed

- Note to physician:** In case of inhalation of toxic decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments:** No specific treatment.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use water in flooding quantities.

Unsuitable extinguishing media: CO₂, foam, sand.

5.2 Special hazards arising from the substance or mixture

Specific hazards: Decomposition products may include the following materials: Carbon dioxide, carbon monoxide, nitrogen oxides, ammonia. Avoid breathing dusts, vapors or fumes from burning materials. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The product is not flammable, but may accelerate the burning of other combustible materials.

5.3 Advice for firefighters

Special precautions for firefighters Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for firefighters Firefighters should wear appropriate protective equipment and self contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming European Standard EN469 will provide a basic level of protection for chemical incidents.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Use suitable protective equipment (section 8). Follow all fire-fighting procedures (section 5).

6.2 Environmental precautions

Environmental precautions Minimize contact of spilled material with soils to prevent runoff to surface waterways.

6.3 Methods and materials for containment and cleaning up

Clean-up methods: Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Absorb with dry sand or other noncombustible material. Avoid creating dusty conditions and prevent wind dispersal. Keep out of waterways. See section 13 for waste disposal information.

6.4 Reference to other sections

Reference to other sections: See sections 7, 8, 13.

7. Handling and storage

7.1 Precautions for safe handling

Personal protection:	Avoid all unnecessary exposure. Ensure prompt removal from eyes, skin and clothing.
Handling:	Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Keep away from food, drink, and animal feeding stuff.
Protective measures:	Both local exhaust and general room ventilation are usually required.
General:	Handle in accordance with good industrial hygiene and safety procedures. Minimize generation of dust.

7.2 Conditions for safe storage, including incompatibilities

Storage:	Store and use away from heat, sparks, open flame, or any other ignition source. Avoid contact with combustible materials. On farm keep away from hay, grain, diesel etc.
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7.3 Specific and use(s)

End use:	See section 1.2
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8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:	Total inhalable dust (TLV-TWA) : 10 mg/m ³ Respirable dust: 4 mg/m ³ Manganese sulfate (TLV-TWA) mg/m ³ : 0.2 Mn
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8.2 Exposure controls

Personal protection

-Respiratory protection:	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
-Hand protection:	Chemical-resistant, impervious gloves or gauntlets complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
-Eye protection:	Use dust goggles if high dust concentration is generated.
-Skin protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
-Ingestion:	When using, do not eat, drink or smoke.

Industrial hygiene	Provide local exhaust or general room ventilation
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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Solid, granules
Colour:	Light brownish granules, inside grey
Odour:	Light
Odour threshold:	Not determined
pH:	10 (Conc. (% w / w) > 4.5

Melting/Freezing point:	Decomposes below melting point for non urea part, 133°C to 253°C (271.4 to 487.4°F), concerning the urea inside the coating
Boiling point:	Decomposes below boiling point
Flash point:	Not applicable (solid)
Evaporation rate:	Not determined (solid)
Flammability:	Not determined (non flammable solid)
Explosion limits (upper-lower):	Not classified as explosive according to EC criteria
Vapour pressure:	not applicable (not volatile)
Density (g/cm³):	loose bulk density 0.9 to 1.3 g/cm ³
Solubility in water:	Good.
Partition coefficient: n-octanol / water:	Not applicable (inorganic solid)
Auto-ignition temperature:	Not applicable (non flammable solid)
Thermal decomposition:	Decomposition > 130 °C depending on composition
Viscosity:	Not applicable (solid)
Explosive properties:	None
Oxidizing properties:	None

9.2 Other information

Other information: No additional information

10. Stability and reactivity

10.1 Reactivity

Reactivity: See 10.2

10.2 Chemical stability

Stability and reactivity: Stable under recommended storage and handling conditions (see section 7).

10.3 Possibility of hazardous reactions

Hazardous reactions: Under normal conditions none.

10.4 Conditions to avoid

Conditions to avoid: Heat, open flame, prevent contamination with irrelevant materials

10.5 Incompatible materials

Materials to avoid: Organic materials, reducing agents, acids, alkalis, oxidizing agents, metallic powders and substances containing metals such as copper, nickel, cobalt, zinc and their alloys.

10.6 Hazardous decomposition products

Hazardous decomposition products:

These products can be carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂ etc.), ammonia (NH₃).

11. Toxicological information

11.1 Information on toxicological effects

Potential acute health effects:

Adverse health effects are considered unlikely, when the product is used according to directions.

Over-exposure signs/symptoms:

Target organs: Contains material which causes damage to the following organs:
skin, eyes, lens or cornea.

12. Ecological information

12.1 Toxicity

Ecological effects information Low toxicity to aquatic life.

LC50-96 hour – fish (mg/l) No data available.

12.2 Persistence and degradability

No known significant effects or critical hazards.

12.3 Bio accumulative potential

No known significant effects or critical hazards.

12.4 Mobility in soil

Mobility

This product may move with surface or groundwater flows because its water solubility is high.

12.5 Results of PBT and vPvB assessment

PBT and vPvB: Not applicable

12.6 Other adverse effects

Other adverse effects: Used in excess quantities the product can cause eutrophication.

13. Disposal considerations

13.1 Waste treatment methods

Methods of Disposal: Empty containers or liners may retain some product residues. Do not empty into drains; dispose of this material and its container in a safe way. Dispose of in accordance with all applicable local and national regulations.

Hazardous waste: To present knowledge of the supplier, this product is not regarded as hazardous waste as defined in EU Directive 2001/118/EC.

14. Transport information

14.1 UN number

General information Not regulated.

14.2 UN proper shipping name

Not regulated.

14.3 Transport hazard class(es)

Land transport Not regulated.

Sea transport Not regulated.

Air transport Not regulated.

14.4 Packing group

Not regulated.

14.5 Environmental hazards

None

14.6 Special precautions for user

None

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

Not applicable.

14.8 IMSBC

Proper shipping name: Ammonium Nitrate based Fertilizer (Non Hazardous)

Class: Not applicable

Group: C

15. Regulatory information

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

Classification and labeling have been performed according to EU directives EU453/2010 (REACH Annex II), including amendments and the intended use.

Ensure all national/local regulations are observed.

Germany: Gefahrstoffverordnung Anhang III/6 und TRGS 511 beachten.

15.2 Chemical safety assessment

No data available

16. Other information

History(*)

Date of issue: 2018-11-07

Datum of previous issue: 2018-01-15

Version: 7

(*) Indicates information that has changed from the previously issued version.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.