

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND NAME OF THE COMPANY / UNDERTAKING**1.1. Product identifier**

TerraCottem® Universal

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

Recommended use: soil conditioner

1.3. Details of the supplier of the safety data sheet

TerraCottem BV

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Web-site www.terracottem.com**Emergency number: (32)56/78.27.58****2. HAZARD IDENTIFICATION****2.1. GHS-Classification as per UN-GHS**

Not applicable.

2.2. Label elements as per UN-GHS

Not applicable.

2.3. Other hazardsSpilled product in contact with water or moisture causes surfaces to become extremely slippery.
Keep out of reach of children.**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Mixture**

Mixture with a base of volcanic pyroclastic rock, PAA/PAM superabsorbent polymers, partly coated NPK-fertilizer with magnesium and micronutrients, synthetic nitrogen fertiliser and root activators.

3.2. Hazardous ingredients as per UN-GHS

Component	CAS-n°	Content	Hazard class/hazard category
Potassium polyacrylate cross-linked	25608-12-2	>= 39.5 %=<	Not applicable.
Ammonium nitrate (AN)	6484-52-2	< 5 %	Ox. Sol. 3, H272 Eye Irrit. 2 , H319

4. FIRST AID MEASURES**4.1. Description of first aid measures**

- | | |
|----------------------|---|
| 4.1.1. Skin contact: | Wash with water and soap. |
| 4.1.2. Eye contact: | Rinse with much water for a prolonged time. |
| 4.1.3. Inhalation: | Breathe fresh air. |
| 4.1.4. Ingestion: | If ill effects occur seek medical advice immediately. |

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

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None known.

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

In case of swallowing: drink plenty of water.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water jet, carbon dioxide, foam, dry extinguishing agents.

5.2. Special hazards arising from the substance or mixture

In case of fire carbon monoxide, carbon dioxide.

5.3. Advice for firefighters

No special requirements.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Spilled product in contact with water makes surfaces extremely slippery.

6.2. Environmental precautions

Collect and flush small residuals with much water into the drain for subsequent biological waste effluent treatment.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel. Clean thoroughly. Repeat procedure if necessary.

6.4. Reference to other sections

For personal protection see section 8.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice:

Use respiratory protection when exceeding limit (see chapter 8) and dust is formed. Ensure sufficient workplace ventilation.

Advice on protection against fire and explosion:

Take measures against electrostatic charge. The product itself is not explosive. However, fine dust may form explosive mixtures in air. Avoid the production of dust.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:

Store in a dry place.

Average temperature for loose bulk storage over 3m³ must not exceed 50°C.

7.3. Specific end use(s)

No specific end use required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components or products of decomposition according to point 10, with limit values related to the place of work that require monitoring:

Potassium polyacrylate, cross-linked 25608-12-2 MAK (DFG) 0.05 mg/m³
Alveolar fraction - Cat. 4.

C – No risk of embryotoxic effects if TLV and BTV limits are complied with.

8.2. Exposure controls

Hygiene measures:	Obey reasonable safety precautions and practice good housekeeping.
Respiratory protection:	Use respiratory protection when exceeding limit (see chapter 8) and dust is formed. Ensure sufficient workplace ventilation.
Hand protection:	Does not apply.
Eye protection:	Use protective goggles.

9. PHYSICAL AND CHEMICAL CHARACTERISTICS

9.1. Information on basic physical and chemical properties

9.1.1. Form:	Mixture of granules and powders.
9.1.2. Colour:	White, brown, blue, beige and grey mixture.
9.1.3. Odour:	Odourless.
9.1.4. Bulk density:	+/- 800 kg/m ³ .
9.1.5. Melting point:	Not applicable.
9.1.6. Boiling point:	Not applicable.
9.1.7. Flash point:	Not applicable.
9.1.8. Ignition temperature:	Not determined.
9.1.9. Upper explosion limit:	Not applicable.
9.1.10. Vapour pressure at 20°C:	< 20 hPa.
9.1.11. Water solubility at 20°C:	Partly soluble.
9.1.12. Dynamic viscosity at 20°C:	Not applicable.
9.1.13. pH at 1,0 g/l:	~7

9.2. Other information

None.

10. STABILITY AND REACTIVITY

10.1. Reactivity

See section 10.2.

10.2. Chemical Stability

Stable under usual application conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Thermal decomposition

Decomposition above 200 °C.

10.5. Incompatible materials

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No known incompatibility with other materials.

10.6. Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

11.1.1. Acute oral toxicity:	LD50 rat - Dose > 5000 mg/kg - Limit test.
11.1.2. Acute dermal toxicity:	LD50 rat - Dose > 2000 mg/kg - Limit test.
11.1.3. Skin irritation:	Rabbit - Method OECD n° 404 - Not irritating to the skin.
11.1.4. Eye irritation:	Rabbit - Method OECD n° 405 – Very slight eye irritation.
11.1.5. Sensitization:	Guinea pig - Method OECD n° 406 - No sensitization.
11.1.6. Aspiration hazard:	Not applicable.
11.1.7. Mutagenicity assessment:	Non mutagenic – Ames test – not mutagenic in in vivo and in vitro tests.
11.1.8. Reprotoxicity/teratogenicity:	No evidence for hazardous properties.

12. ECOLOGICAL INFORMATION**12.1. Toxicity**

12.1.1. Ciliate toxicity:	Tetrahymena pyriformis EC50 > 6000 mg/l - Exposure time 24 h.
12.1.2. Bacterial toxicity:	Ps. Putida EC50 > 6000 mg/l - Exposure time 24 h - Method DEV L8.
12.1.3. Fish toxicity:	Leuciscus idus LC50 > 5500 mg/l - Exposure time 96 h - Method OECD n° 203.
12.1.4. Fish toxicity:	Brachydanio rerio LC50 > 4000 mg/l - Exposure time 96 h - Method OECD n° 203.
12.1.5. Toxicity in living organisms:	Eisenia foetida – Acute earthworm toxicity LC50 > 20000 mg/kg – Exposure time 14 days – Method OECD n° 207.

12.2. Persistence and degradability

Biodegradability: Not rapidly degradable under aerobic conditions.

12.3. Bioaccumulative potential

Bioaccumulation: Does not accumulate in living organisms.

12.4. Mobility in soil

Mobility: No evidence for hazardous properties.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment: PBT: none – vPvB: none.

12.6. Other adverse effects

General information: None known.

13. INFORMATION CONCERNING DISPOSAL**13.1. Waste treatment methods**

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Product:	Disposal according to local legal regulations.
Elimination:	Incineration according to local legal regulations.
Uncleaned packaging:	Undamaged packaging may be responsibly reused after proper cleaning.

14. INFORMATION CONCERNING TRANSPORT**14.1. UN number** See section 14.2.**14.2. UN proper shipping name**

Land transport:	ADR / RID - Not dangerous goods according to transportation regulations.
Sea transport:	IMPG - Not dangerous goods according to transportation regulations.
Air transport:	ICAO / IATA - Not dangerous goods.

14.3. Transport hazard class

See section 14.2.

14.4. Packing group

See section 14.2.

14.5. Environmental hazards

See section 14.2.

14.6. Special precautions for user

See section 14.2.

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

For transport approval see regulatory information.

15. REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture. Labelling according to EEC Directive 67/548/EC or Directive 1999/45/EC:**

Danger symbol and designation:	No labelling duty according to the EC-Hazardous Materials regulations.
R-phrases:	None.
S-Phrases:	None.

National legislation / regulations:

Particular labelling of certain preparations:	None.
Employment limitations:	None.
Interference regulations:	None.
Technical Regulations Air:	None.
Water pollution class:	WGK 1 - slightly water polluting preparation.
Other regulations, limitations and prohibition regulations	None.

16. OTHER INFORMATION**16.1. Relevant H-phrases**

For section 3.2	Ox. Sol. 3	Oxidising Solids, Category 3
	Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
	H272	May intensify fire; oxidiser.

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H319 Causes serious eye irritation.

16.2. Residual monomers

Residual monomers:

Acrylamide < 20 PPM - Acrylic acid < 250 PPM.

16.3. Further information

Data sheet writing department:
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