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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

Trade name: TERRA VEGA

Synonym(s): -

Relevant identified uses of the substance or mixture and uses advised against: Liquid NPK fertilizer.

Product category: Product Category 12 (PC12 Fertilizers),  
Sector of Use 21 (SU21 Consumer uses).

### Details of the supplier of the safety data sheet

#### Manufacturer/supplier:

CANNA B.V.  
P.O. Box 161  
4900 AD Oosterhout  
The Netherlands

Tel.: +31 (0) 162-49 48 43

Fax: +31 (0) 162-49 59 99

#### Further information obtainable from:

Contact person: N. Linton

Tel.: +31 (0) 162-68 00 12

Email: [msds@canna.com](mailto:msds@canna.com)

Working hours  
(business days): 09:00-17:00.

#### Emergency telephone number:

The Netherlands: National Poison Information Centre: +31 (0) 30 247 88 88

Belgium: Belgian Poison Centre: +32 (0) 70 245 245

United Kingdom: UWIC: +44 (0) 29 204 16388

## SECTION 2: Hazards identification

### Classification of the substance or mixture

Classification in accordance with Regulation (EC) no. 1272/2008

Eye Irrit. 2 H319

### Label elements and precautionary statement

#### Hazards pictograms:



Signal word: Warning.

#### Hazard statements:

H319 Causes serious eye irritation.

#### Precautions:

P102 Keep out of reach of children.

P264 Wash hands thoroughly after handling this product.

P280 Wear eye protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

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**Trade name: TERRA VEGA****Classification in accordance with Directive 67/548/EEC or Directive 1999/45/EC**

Void.

**Label elements****Hazard symbols:**

-

**Classification of the****labelling:** -**Risk phrase(s):** -**Safety advice:** -**Hazard-determining components for****labelling:** Ammonium nitrate.**Other hazards**

Void.

**Results of PBT and vPvB assessment****PBT:** No.**vPvB:** No.

## SECTION 3: Composition/information on ingredients

**Chemical characterization:** Mixture.**Description:** Preparation based on i.a. water, potassium nitrate, magnesium nitrate, ammonium nitrate, phosphoric acid and nitric acid.**Hazardous ingredients****Potassium nitrate**

CAS#: 7757-79-1

EC#: 231-818-8

Index#: -

REACH reg.#: -

Concentration (W/W):

5 - 10 %

Danger:

1999/45/EC: O; R8.

1272/2008/EC: Ox. Sol. 2; H272.

**Magnesium nitrate**

CAS#: 10377-60-3

EC#: 233-826-7

Index#: -

REACH reg.#: -

Concentration (W/W):

5 - 10 %

Danger:

1999/45/EC: O; R8.

1272/2008/EC: Ox. Sol. 2; H272.

**Ammonium nitrate**

CAS#: 6484-52-2

EC#: 229-347-8

Index#: -

REACH reg.#: -

Concentration (W/W):

5 - 10 %

Danger:

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1999/45/EC: O; R8 - Xi; R36.  
1272/2008/EC: Ox. Sol. 2; H272 - Eye Irrit. 2; H319.

**Phosphoric acid 59 %**

CAS#: 7664-38-2  
EC#: 231-633-2  
Index#: 015-011-00-6  
REACH reg.#: -  
Concentration (W/W):  
1 - 5 %

**Danger:**

1999/45/EC: C; R34.  
1272/2008/EC: Skin Corr. 1B; H314.

**Nitric acid 38 %**

CAS#: 7697-37-2  
EC#: 231-714-2  
Index#: 007-004-00-1  
REACH reg.#: -  
Concentration (W/W):  
0.1 - 1 %

**Danger:**

1999/45/EC: O; R8 - C; R35.  
1272/2008/EC: Ox. Liq. 3; H272 - Skin Corr. 1A; H314.

Full text of each relevant R-, H- and EUH- phrase(s) can be found in section 16.

## SECTION 4: First aid measures

### Description of first aid measures

**General information:**

Remove victim from danger zone and place in lying position.  
In case of irregular breathing or respiratory arrest provide artificial respiration.  
Remove immediately all contaminated clothing.  
Substance is harmful to tissue after continuous contact. Rinsing immediately following exposure can limit injury.

**Inhalation:**

Remove to fresh air.  
If the victim is not breathing, apply artificial respiration.

**Skin contact:**

Immediately wash with plenty of water and soap. Seek professional medical treatment in case of persistent complaints.

**Eye contact:**

Remove contact lenses, if present, and immediately rinse eyes while holding eyelids open for a sufficient period of time (at least 15 minutes) with lukewarm water. Help the victim with the rinsing process. Then immediately consult a physician/ophthalmologist.

**Ingestion:**

Rinse mouth immediately with water (if conscious), and then drink plenty of water. Do not induce vomiting (only under the supervision of a physician) and immediately consult a physician or take victim to hospital (show physician packaging, label or SDS). Place unconscious person on the side in the recovery position. Loosen tight clothing such as a shirt collar, tie, belt or waistband. Keep at rest.

**Most important symptoms and effects, both acute and delayed****Inhalation:**

Exposure to vapour concentrations of component dusts higher than the MAC value can be harmful to the health. Potential health effects include: burning sensation, coughing, difficulty breathing, loss of consciousness. Effects may be delayed. Inhalation of aerosol and/or mist may cause pneumonia and/or lung oedema, but only after initial corrosive effects on the mucous membranes of the eyes and/or upper airways have become manifest.

**Skin contact:**

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Slightly irritating to the skin. Signs and symptoms of skin irritation may include redness and a yellow discolouration. Contains phosphoric acid which may be absorbed through the skin.

**Eye contact:**

May cause irreversible damage to the eyes. Corrosive. Redness.

**Ingestion:**

Stomach ache. Irritation of gastro-intestinal mucosa.

**Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment and supportive therapy as prescribed. Symptomatic treatment (decontamination, control of vital functions). No specific antidote known. To prevent pulmonary oedema from severe exposure: corticosteroid-containing dosing aerosol.

## SECTION 5: Firefighting measures

### Extinguishing media

**Suitable extinguishing media:**

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water spray.

Foam.

Sand.

Adapt extinguishing measures to suit the environment.

**Unsuitable extinguishing media:**

Powerful water jet.

### Special hazards arising from the substance or mixture

During heating or in case of fire, poisonous gases may be produced.

May be released in event of fire:

Nitrogen oxides (NO<sub>x</sub>).

Ammonia (NH<sub>3</sub>).

Phosphorus oxides.

### Advice for firefighters

**Special protective clothing:**

Wear self-contained breathing apparatus.

### Other information

Cool exposed containers with water spray.

Collect contaminated extinguishing water separately, do not allow to reach sewage.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Ensure sufficient ventilation.

Wear personal protective equipment.

Keep dried material away from sources of ignition.

Keep unprotected persons at a distance.

### Environmental precautions

Do not allow large quantities to reach sewage system/surface water/groundwater.

Prevent release in effluents, wells or cellars.

### Methods and material for containment and cleaning up

Soak up immediately with absorbent material (sand, diatomaceous earth, acid binder, universal binder, sawdust).

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Dispose of absorbed material according to regulations.  
Remove contaminated material as waste according to section 13.

### Reference to other sections

Information regarding safe handling – see section 7.  
Information regarding personal protective equipment – see section 8.  
Information regarding disposal – see section 13.

## SECTION 7: Handling and storage

### Handling

#### Precautions for safe handling:

Provide adequate ventilation/extraction in the workplace.  
Open and handle package with care.  
Avoid formation of aerosols.  
In case of expert use, no special measures are required.

#### Information regarding fire and explosion risk:

Keep away from ignition sources - do not smoke.

### Conditions for safe storage, including any incompatibilities

#### Storage:

Rinse/clean equipment prior to maintenance activities.  
Ensure the safety of the tank installation to limit risks of exposure.  
Regularly check the installation for correct operation.  
Provide a liquid-resistant floor or store materials in packaging in acid-proof drip-trays.  
Make the content of the dip-tray equal to the content of the largest package plus 10% of the other packages.  
Restrict access to the storage location to authorised personnel in case of risk of exposure.  
Close containers after each use.  
Handle empty containers as if they were full.

#### Requirements to be met by storerooms and receptacles:

Keep only in the original container.  
Keep in a dark place.  
Store in a frost-free environment.  
Protect from heat and direct sunlight.  
Suitable packaging material: Polyethylene.  
Suitable material for tanks and pipelines: Stainless steel, PVC.

#### Information about storage in one common storage facility:

Install partitions in the drip tray to prevent acidic and alkaline fertilisers from coming into contact with one other.

#### Other information regarding storage requirements:

Keep tanks / packing hermetically closed.  
Keep in a cool place.  
Recommended storage temperature 10 - 30 °C.

### Specific end use(s)

No further relevant information available.

## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Ingredients with limit values that require monitoring at the workplace:

Product information: 7757-79-1	Potassium nitrate
TWA 8 h	mg/m <sup>3</sup> (ppm) 5 (-) inhalable dust

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Product information: 7697-37-2	Nitric acid	
TWA 15 min.	mg/m <sup>3</sup> (ppm)	2.6 (1) 2006/15/EC
Product information: 7664-38-2	Phosphoric acid	
TWA 8 h	mg/m <sup>3</sup> (ppm)	1 (1.3) 2000/39/EC
TWA 15 min.		2 (2.6) 2000/39/EC

### Dangerous ingredients with DN(M)EL:

Product information: 7757-79-1 Potassium nitrate	Exposure	Value	Unit	Population / Effects
DN(M)EL	Short-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Long-term dermal	20.8	mg/kg bw/day	Workers Systemic
DN(M)EL	Long-term inhalation	36.7	mg/m <sup>3</sup>	Workers Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Short-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	General population Local
DN(M)EL	Long-term dermal	12.5	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term inhalation	10.9	mg/m <sup>3</sup>	General population Systemic
DN(M)EL	Long-term oral	12.5	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	General population Local

### Dangerous ingredients with DN(M)EL:

Product information: 10377-60-3 Magnesium nitrate	Exposure	Value	Unit	Population / Effects
DN(M)EL	Short-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Long-term dermal	20.8	mg/kg bw/day	Workers Systemic
DN(M)EL	Long-term inhalation	36.7	mg/m <sup>3</sup>	Workers Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Short-term dermal	-	mg/kg bw/day	General population

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				Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	General population Local
DN(M)EL	Long-term dermal	12.5	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term inhalation	10.9	mg/m <sup>3</sup>	General population Systemic
DN(M)EL	Long-term oral	12.5	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	General population Local

#### Dangerous ingredients with DN(M)EL:

Product information: 6484-52-2 Ammonium nitrate	Exposure	Value	Unit	Population / Effects
DN(M)EL	Short-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Long-term dermal	21.3	mg/kg bw/day	Workers Systemic
DN(M)EL	Long-term inhalation	37.6	mg/m <sup>3</sup>	Workers Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Short-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	General population Local
DN(M)EL	Long-term dermal	12.8	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term inhalation	11.1	mg/m <sup>3</sup>	General population Systemic
DN(M)EL	Long-term oral	12.8	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	General population Local

#### Dangerous ingredients with DN(M)EL:

Product information: 7664-38-2 Phosphoric acid	Exposure	Value	Unit	Population / Effects
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DN(M)EL	Short-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Systemic
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	Workers Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Long-term inhalation	2.92	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Short-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	General population Local
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	General population Systemic
DN(M)EL	Long-term oral	-	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Long-term inhalation	0.73	mg/m <sup>3</sup>	General population Local

**Dangerous ingredients with DN(M)EL:**

Product information: 7697-37-2 Nitric acid	Exposure	Value	Unit	Population / Effects
DN(M)EL	Short-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Short-term inhalation	2.6	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Systemic
DN(M)EL	Long-term inhalation	1.3	mg/m <sup>3</sup>	Workers Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Short-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Short-term inhalation	1.3	mg/m <sup>3</sup>	General population Local
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	General population Systemic



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DN(M)EL	Long-term oral	-	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Long-term inhalation	0.65	mg/m <sup>3</sup>	General population Local

### Dangerous ingredients with PNEC:

Product information: 7757-79-1 Potassium nitrate	Value	Unit	Compartment
PNEC	0.45	mg/l	Fresh water
PNEC	0.045	mg/l	Marine water
PNEC	4.5	mg/l	Intermittent releases
PNEC	18	mg/l	STP (sewage treatment plant)
PNEC	-	mg/kg dwt	Sediment fresh water
PNEC	-	mg/kg dwt	Sediment marine water
PNEC	-	mg/kg wwt	Soil
PNEC	No bio-accumulation potential	mg/l	Oral

### Dangerous ingredients with PNEC:

Product information: 10377-60-3 Magnesium nitrate	Value	Unit	Compartment
PNEC	0.45	mg/l	Fresh water
PNEC	0.045	mg/l	Marine water
PNEC	4.5	mg/l	Intermittent releases
PNEC	18	mg/l	STP (sewage treatment plant)
PNEC	-	mg/kg dwt	Sediment fresh water
PNEC	-	mg/kg dwt	Sediment marine water
PNEC	-	mg/kg wwt	Soil
PNEC	No bio-accumulation potential	mg/l	Oral (foodstuffs)

### Dangerous ingredients with PNEC:

Product information: 6484-52-2 Ammonium nitrate	Value	Unit	Compartment
PNEC	0.45	mg/l	Fresh water
PNEC	0.045	mg/l	Marine water
PNEC	4.5	mg/l	Intermittent releases
PNEC	18	mg/l	STP (sewage treatment plant)
PNEC	-	mg/kg dwt	Sediment fresh water
PNEC	-	mg/kg dwt	Sediment marine water
PNEC	-	mg/kg wwt	Soil
PNEC	No bio-accumulation potential	mg/l	Oral

## Exposure controls

### Personal protective equipment:

Remove immediately all contaminated clothing.

Store protective clothing separately.

Avoid contact with the eyes and skin.

### General protective and hygienic measures:

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Keep away from food and drink.

Do not eat, drink or smoke while handling this product.

The customary precautionary measures for handling chemicals are to be observed.

**Respiratory protection:**

If the workplace limit value cannot be achieved with engineering controls, workers should wear a combination filter for short-term exposures (e.g. gas filter for acid inorganic gases/vapours, EN 14387 type E).

**Hand protection:**



Wear safety gloves.

The glove material (EN374) must be impermeable and resistant to the product / substance / preparation.

When choosing glove material, consider breakthrough times, diffusion rates and degradation.

**Glove material**

The selection of appropriate gloves does not only depend on the material but also on other quality features, and may vary from manufacturer to manufacturer.

**Breakthrough times of the glove material.**

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

**Eye protection:**



Use close-fitting safety goggles. Eye shower. Full facemask with splash/spatter risk.

**Body protection:**

Wear suitable protective work clothing (in case of splash risk).

**Measurement procedures:**

In order to establish compliance with an exposure limit and to establish that exposure is properly controlled, it may be necessary to determine the concentration of the substances in the inhalation zone or in the general workspace.

**Environmental exposure controls:**

Do not discharge in surface water in concentrated form.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

**General information**

**Appearance**

<b>Form:</b>	Liquid.
<b>Colour:</b>	Orange-yellow.
<b>Odour:</b>	Soy-ish.
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.

**Change in condition**

<b>Melting point/melting range:</b>	Not determined.
<b>Boiling point/boiling range:</b>	Not determined.
<b>Flash point:</b>	> 93 °C.

<b>Flammability (solid, gas):</b>	Not applicable.
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<b>Auto-ignition temperature:</b>	Not determined.
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<b>Explosion hazard:</b>	Not determined.
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**Explosive limits**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

<b>Vapour pressure:</b>	Not determined.
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<b>Relative density:</b>	1.09 (water = 1).
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<b>Vapour density:</b>	Not determined.
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<b>Evaporation rate:</b>	Not determined.
<b>Solubility in/miscibility with water:</b>	Fully.
<b>Partition coefficient: n-octanol/water:</b>	Not determined.
<b>Viscosity</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

### Reactivity

#### Chemical stability:

The product is stable if stored and handled as prescribed.

#### Thermal decomposition/Conditions to avoid:

The product is stable if used as prescribed. Avoid storing at high temperatures (> 30 °C) to prevent degradation of the material or pressure build-up. Avoid low temperatures (< 10 °C) to prevent crystallization from occurring.

Material is susceptible to frost.

### Possibility of hazardous reactions

Contact with strong reducing agents.

### Conditions to avoid

Avoid heat, sparks, open flames, and other sources of ignition. Prevent evaporation in a non-ventilated environment. Protect against heat and direct sunlight. Protect against frost.

### Incompatible materials

Mildly corrosive to brass. Mildly corrosive to galvanized metal.

### Hazardous decomposition products

No hazardous decomposition products are formed if stored under normal conditions. Upon heating or combustion, irritating or toxic fumes such as nitrogen oxides, ammonia, and phosphorus oxides may be released.

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity from the components:

LD/LC50 values relevant for classification:		
Product information: 7757-79-1 Potassium nitrate		
Oral	LD50	> 2000 mg/kg (rat) (OECD 425) 3750 mg/kg (rat) 1901 mg/kg (rabbit)
Inhalation	LC50 (4 h)	0.527 mg/l (rat) (OECD 403, inhalable dust)
Dermal	LD50	> 5000 mg/kg (rat) (OECD 402)
Product information: 10377-60-3 Magnesium nitrate		
Oral	LD50	> 5000 mg/kg (rat) (OECD 423)
Inhalation	LC50 (4 h)	-
Dermal	LD50	> 5000 mg/kg (rat) (OECD 402)
Product information: 6484-52-2 Ammonium nitrate		

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Oral	LD50	2950 mg/kg (rat) (OECD 401)
Inhalation	LC50 (4 h)	> 88.8 mg/l (rat) (OECD 403)
Dermal	LD50	> 5000 mg/kg (rat) (OECD 402)
Product information: 7664-38-2		Phosphoric acid
Oral	LD50	2000 mg/kg (rat) (OECD 423)
Inhalation	LC50 (1 h)	3846 mg/l (rat) (OECD 403)
Dermal	LD50	2740 mg/kg (rabbit)
Product information: 7697-37-2		Nitric acid
Oral	LD50	430 mg/kg (human)
Inhalation	LC50 (4 h)	> 80 mg/l (rat) (OECD 403)
Dermal	LD50	-

**The following health risk assessment is based on an assessment of the various ingredients in the product.**

**Primary irritant effect:**

**on the skin:**

Irritates the skin and the mucous membranes.

**on the eye:**

Irritant / corrosive effect.

**Germ cell mutagenicity:**

Not classified.

**Reproductive and developmental toxicity:**

Not classified.

**Sensitisation:**

No sensitising effects known.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

Not classified.

**Other information:**

No further relevant information available.

## SECTION 12: Ecological information

### Toxicology information

**Ecotoxicity from the components:**

<b>Aquatic toxicity:</b>		
Product information: 7757-79-1		Potassium nitrate
Fish	LC50 (96 h)	> 98.9 mg/l (OECD 203) 180 - 200 mg/l (poecilia reticulata)
Water flea	EC50 (48 h)	490 mg/l (daphnia magna)
Algae	EC50	-
Bacteria	EC50	-
Product information: 10377-60-3		Magnesium nitrate
Fish	LC50 (96 h)	191 mg/l (95% CI 391-513)
Water flea	EC50 (96 h)	490 mg/l (daphnia magna)
Algae	EC50	-
Bacteria	EC50	-
Product information: 6484-52-2		Ammonium nitrate
Fish	LC50 (48 h)	447 mg/l (95% CI 391-513)
Water flea	EC50	-
Algae	EC50	-
Bacteria	EC50	-
Product information: 7664-38-2		Phosphoric acid

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Fish	LC100 (96 h)	3 - 3.25 mg/l (bluegill sunfish)
Water flea	EC50 (96 h)	> 100 mg/l (daphnia magna)
Algae	EC50	-
Bacteria	EC50	-
Product information: 7697-37-2		Nitric acid
Fish	LC100 (96 h)	3 - 3.5 mg/l (bluegill sunfish)
	LC50 (96 h)	> 100 mg/l
Water flea	EC50 (96 h)	490 mg/l (daphnia magna)
	EC50 (48 h)	180 mg/l (daphnia magna)
Algae	EC50	-
Bacteria	EC50	-

**The following ecological risk assessment is based on an assessment of the various ingredients in the product.**

### Persistence and degradability

Partially inorganic and presumed to be partially biodegradable over the long-term.

### Behaviour in environmental compartments

#### Bioaccumulative potential:

Bioaccumulation in organisms is not expected.

#### Mobility in soil:

No further relevant information available.

### Further ecological information

#### General information:

Water hazard class 1 (German regulation) (Self-assessment): slightly hazardous to water. Do not discharge undiluted product into groundwater, surface water or sewage system.

### Results of PBT and vPvB assessment

The mixture does not meet all of the assessment criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

### Other adverse effects

Contains substances that contribute to eutrophication: Nitrates.

## SECTION 13: Disposal considerations

### Waste treatment methods

#### Recommendation:

May be brought to a supervised incineration plant in compliance with local regulations.

#### EC Regulation for Disposal of Waste (EWC):

06 10 02\* WASTES FROM INORGANIC CHEMICAL PROCESSES, wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture; waste containing dangerous substances.

### Uncleaned packaging

#### Recommendation:

Disposal must be made according to official regulations. Empty the packaging with care. Do not contaminate soil, water or environment with the waste container. Comply with local regulations with regard to the recovery or disposal of waste.

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**Trade name: TERRA VEGA**

## SECTION 14: Transport information

### Land transport ADR/RID (cross-border)

**ADR/GGVSEB class:** Not a dangerous good according to the transport regulations.  
**Hazard identification number:** -  
**UN number:** -  
**Packing group:** -  
**Label:** -  
**Special marking:** -  
**Proper shipping name from the UN Model Regulations:** -  
**Tunnel restriction code:** -

### Inland shipping ADN/ADR

**ADN/R-class:** -  
**UN number:** -  
**Subsidiary risk**  
**Environmental hazards:** -  
**CMR properties:** -  
**Buoyancy:** -

### Maritime transport IMDG

**IMDG-class:** -  
**UN number:** -  
**Label:** -  
**Packing group:** -  
**EMS number:** -  
**Marine pollutant:** -  
**Proper technical name:** -

### Air transport ICAO-TI and IATA-DGR

**ICAO/IATA-class:** -  
**UN number:** -  
**Label:** -  
**Packing group:** -  
**Proper technical name:** -

### Environmental hazards

No.

### Special precautions for user

None.

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

No further relevant information available.

## SECTION 15: Regulatory information

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

**National regulations:** -

### EU regulations and directives which affect this mixture (not yet directly or indirectly mentioned):

Directive 89/686/EEC Personal protective equipment.  
Directive 98/24/EC Risks related to chemical agents at work.  
Regulation 2003/2003/EC Concerning fertilisers.

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### Chemical safety assessment

A chemical safety assessment has not been carried out.

## SECTION 16: Other information

This information is based on the current state of our knowledge. It should not be construed as any guarantee of product characteristics, nor does it establish a legally valid contractual relationship.

### List of relevant R-, H- and EUH-phrases from sections 2 and 3

R8	Contact with combustible material may cause fire.
R34	Causes burns.
R36	Irritating to eyes.
H272	May intensify fire; oxidiser.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.

### Document history

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### Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
IATA-DGR:	Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
P:	Marine Pollutant
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
EC50:	Half maximal effective concentration
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
OEL:	Occupational Exposure Limit
NOEC:	No Observed Effect Concentration
vPvB:	Very Persistent and Very Bioaccumulative
PBT:	Persistent, Bioaccumulative and Toxic substance
EWC:	European Waste Catalogue
TWA:	Time-Weighted Average, limit value pertaining to the MAC value
DNEL:	Derived No-Effect Level
DMEL:	Derived Minimal Effect Level
PNEC:	Predicted No-Effect Concentration