



## TULSI ENTERPRISES LTD.

### Safety Data Sheet Overgrow

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#### SECTION 1: Identification

##### 1.1 Product identifier

Product name	Overgrow
Brand	Optic Foliar

##### 1.3 Recommended use of the chemical and restrictions on use

Plant Foliar Spray

##### 1.4 Supplier's details

Name	Tulsi Enterprises Ltd.
Address	PO BOX 31016, Sunshine Village, Delta BC V4E 3M9

Telephone	(604) 218-8567
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##### 1.5 Emergency phone number(s)

(604) 218-8567

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#### SECTION 2: Hazard identification

##### 2.1 Classification of the substance or mixture

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Eye damage/irritation, Cat. 2A

##### 2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

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### Hazard statement(s)

H319 Causes serious eye irritation

### Precautionary statement(s)

P264 Wash with water thoroughly after handling.  
P280 Wear eye protection/face 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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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Components

##### 1. Potassium nitrate

Concentration 1 - 2 %  
CAS no. 7757-79-1

- Oxidizing solids, Cat. 3

H272 May intensify fire; oxidizer

##### 2. Potassium sulfate

Concentration 0.5 - 1 %  
EC no. 231-915-5  
CAS no. 7778-80-5

##### 3. Ammonium Nitrate

Concentration 1 - 2 %  
EC no. 229-347-8  
CAS no. 6484-52-2

- Oxidizing solids, Cat. 3  
- Serious eye damage/eye irritation, Cat. 2

H272 May intensify fire; oxidizer  
H319 Causes serious eye irritation

##### 4. Potassium phosphate Monobasic

Concentration 1 - 2 %  
CAS no. 7778-77-0

##### 5. Magnesium sulfate anhydrous

Concentration 1 - 2 %  
CAS no. 7487-88-9

##### 6. Calcium nitrate tetrahydrate

Concentration 1 - 2 %

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EC no. 233-332-1  
CAS no. 10124-37-5

- Acute toxicity, oral, Cat. 4  
- Eye damage/irritation, Cat. 1

H302 Harmful if swallowed  
H318 Causes serious eye damage

### 7. Thiamine Hydrochloride

Concentration 0.05 - 0.05 %  
EC no. 200-641-8  
CAS no. 67-03-8

- Serious eye damage/eye irritation, Cat. 2

H319 Causes serious eye irritation

### 8. Water

Concentration 90 - 95 % (weight)  
EC no. 231-791-2  
CAS no. 7732-18-5

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## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

If inhaled	Remove to fresh air and promote deep breathing. Get medical attention if effects persist.
In case of skin contact	Wash with plenty of water for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Take off contaminated clothing and wash it before reuse.  Acute and delayed symptoms and effects: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.  Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
If swallowed	Do not induce vomiting. Never give anything by mouth to an unconscious person. Give water to drink if conscious. Get medical attention if effects persist.  Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

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### 4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically and supportively.

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## SECTION 5: Fire-fighting measures

### 5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Specific hazards arising from the chemical

None known

### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### Further information

Use water spray to cool unopened containers.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

### 6.2 Environmental precautions

Do not discharge product into natural waters without pre-treatment or adequate dilution.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of in accordance with applicable local or national requirements. Keep in suitable, closed containers for disposal.

#### Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not eat, drink or smoke while handling. Wash hands with soap and water after handling. Keep out of the reach of children. For precautions see section 2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

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## SECTION 8: Exposure controls/personal protection

### 8.2 Appropriate engineering controls

Under manufacturers recommended use, no particular controls necessary.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

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### Eye/face protection

Chemical goggles or safety glasses.

### Skin protection

Wear suitable protective clothing.

### Body protection

Manufacturing Sites:

Wear suitable protective clothing.

Distribution, Workplace and Household Settings:

No special protective equipment required

### Respiratory protection

Distribution, Workplace and Household Settings: No special protective equipment required. Product Manufacturing Plant (needed at Product-Producing Plant ONLY): In case of insufficient ventilation wear suitable respiratory equipment

### Thermal hazards

No data available.

### Environmental exposure controls

No data available.

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## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Light Green Color Liquid
Odor	No Odor
Odor threshold	No data available.
pH	7
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

### Other safety information

No data available.

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### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Contact with incompatible materials. Sources of ignition. Exposure to heat.

#### 10.2 Chemical stability

Stable under normal storage conditions.

#### 10.3 Possibility of hazardous reactions

No data available.

#### 10.4 Conditions to avoid

Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

#### 10.5 Incompatible materials

Avoid contact with strong oxidizers, strong mineral acids such as sulphuric acid, nitrating agents, halogenating agents, alkali metals or aluminum.

#### 10.6 Hazardous decomposition products

Nitrogen oxides, ammonia, hydrogen cyanide, nitriles, isocyanates, nitrosamines, formaldehyde, carbon monoxide, carbon dioxide and other unidentified hydrocarbons in smoke may occur.

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Water: In the event of fire: see section 5

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### SECTION 11: Toxicological information

#### Information on toxicological effects

##### Acute toxicity

As Mixture: No data Available

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Potassium nitrate: Acute Oral Toxicity: LD50 >2000 mg/kg bw

Acute Dermal Toxicity: LD50 >2000 mg/kg bw

Acute Inhalation Toxicity: LC50 >0.527 mg/L (highest attainable concentration)

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Potassium sulfate: With potassium sulphate a reliable acute dermal toxicity study in rats (according to OECD 402) has been performed showing an LD50 > 2000 mg/kgbw. A reliable acute oral toxicity study with rats according to OECD 425 with potassium magnesium sulphate has been performed, showing LD50>2000 mg/kg bw. An inhalation study with ammonium sulphate investigating mucociliary clearance did not show effects in rats at 3.6 mg/m<sup>3</sup>.

Based on reliable studies on potassium magnesium sulphate and ammonium sulphate for acute oral route, the LD50 for the sulphate category is >2000 mg/kg. Based on a reliable acute inhalation study on ammonium sulphate, the LC50 for the sulphate category is >1200 mg/m<sup>3</sup>.

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Ammonium Nitrate: Acute Oral Toxicity: LD50>2000 mg/kg bw

Acute Dermal Toxicity: LD50>5000 mg/kg bw

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Potassium phosphate Monobasic: Acute Oral Toxicity: LD50>2000 mg/kg bw.

Acute Dermal Toxicity: LD50 >2000 mg/kg bw.

Acute Inhalation Toxicity: LC50>0.83 mg/L (maximum attainable concentration)

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Magnesium sulfate anhydrous: Acute Toxicity Oral: LD50 > 2000 mg/kg bw.  
Acute Toxicity Dermal: LD50 > 2000 mg/kg bw.

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Calcium nitrate tetrahydrate: Acute Oral Toxicity: LD50 300 mg/kg bw  
Acute Dermal Toxicity: LD50 >2000 mg/kg bw

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Thiamine Hydrochloride: Acute Oral Toxicity: LD50 13347 mg/kg bw

### **Skin corrosion/irritation**

As Mixture: No data Available

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Potassium nitrate: No reliable skin irritation study with potassium nitrate itself is present. However, in a reliable skin irritation study in rabbits (performed comparable to OECD 404) with ammonium nitrate, no signs of skin irritation was observed up to 72 hours.

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Potassium sulfate: An in vitro human skin irritation study according to the EU guideline, performed with Potassium sulfate (containing 15% KHSO<sub>4</sub>) does not show irritation.

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Ammonium Nitrate: Not Skin irritant.

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Potassium phosphate Monobasic: Not irritant

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Magnesium sulfate anhydrous: No studies with magnesium sulphate are available. Based on reliable studies with potassium sulphate showing no to minimal irritation to the skin, it is concluded that that magnesium sulphate is not irritating to skin. Results with ammonium sulphate are in agreement with this.

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Calcium nitrate tetrahydrate: Not Irritating

### **Serious eye damage/irritation**

As Mixture: May cause sever Eye Irritation.

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Potassium nitrate: Potassium nitrate did not show irritation effects in an in vitro and in vivo eye irritation study according to the respective OECD guidelines.

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Potassium sulfate: An in vivo eye irritation study according to OECD guideline 405 with potassium sulphate 99% pure is not irritating in rabbits. Additionally an in vitro eye irritation study according to OECD guideline 437 with potassium sulphate containing 15% KHSO<sub>4</sub>, is severely irritating in bovine cornea.

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Ammonium Nitrate: Causes serious eye irritation.

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Potassium phosphate Monobasic: Not irritant

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Magnesium sulfate anhydrous: No studies with magnesium sulphate are available. Based on reliable studies with potassium sulphate showing no to minimal irritation to the eyes, it is concluded that that magnesium sulphate is not irritating to eyes. Results with ammonium sulphate are in agreement with this.

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Calcium nitrate tetrahydrate: Severe irritation to eyes.

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Thiamine Hydrochloride: Cause Sever Eye Irritation.

### **Respiratory or skin sensitization**

As Mixture: No data Vailable

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Potassium nitrate: Not Sensitizer.

-----  
Potassium sulfate: According to Directive 67/548/EC and the CLP Directive no classification of potassium sulphate for sensitisation is required based on the data present.

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Ammonium Nitrate: Not Sensitiser.

-----  
Potassium phosphate Monobasic: Not irritant

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Magnesium sulfate anhydrous: According to Directive 67/548/EC and the CLP Directive no classification of magnesium sulphate for sensitisation is required based on the reliable data present.

### **Germ cell mutagenicity**

As Mixture: No data Vailable

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Potassium nitrate: Potassium nitrate is not mutagenic in Salmonella typhimurium strains TA 1535, TA 1537, A 1538, TA 98, TA 100, and TA 92 with and without metabolic activation. No chromosomal aberrations were induced in a Chinese hamster fibroblast cell line without metabolic activation. In a study comparable to OECD guideline 479, no SCEs were induced in lymphocytes. In addition, an OECD guideline 476 and EC guideline B.17 study showed no effects on the thymidine kinase locus in L5178Y mouse lymphoma cells.

No in vivo studies are required, as all in vitro studies showed no genotoxicity.

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Potassium sulfate: The available data indicate that no classification is required with regard to mutagenicity for potassium sulphate according to Directive 67/548/EC and the CLP directive.

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Ammonium Nitrate: Based on the available data, ammonium nitrate does not have to be classified for genotoxicity according to Regulation (EC) No 1272/2008.

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Potassium phosphate Monobasic: Not Mutagenic

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Magnesium sulfate anhydrous: The available data indicate that no classification is required with regard to mutagenicity for magnesium sulphate according to Directive 67/548/EC and the CLP directive.

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Calcium nitrate tetrahydrate: No reliable studies with calcium nitrate itself are available. CN-Nitcal appeared to be not mutagenic in the Ames test and in a chromosome aberration study. Potassium nitrate was negative in a Mouse Lymphoma assay with and without metabolic activation.

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Thiamine Hydrochloride: Ames: Under the conditions of the study provided, the test material is not mutagenic in the Salmonella typhimurium reverse mutation assay and in the Escherichia coli reverse mutation assay.

MLA: Under the conditions of this study, it is concluded that the test material is not mutagenic in the TK mutation test system.

In vitro Micronucleus: Under the conditions of this study, the test material was not clastogenic or aneugenic in human lymphocytes.

### **Carcinogenicity**

As Mixture: No data Available

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Potassium nitrate: Potassium nitrate is not genotoxic and no substance related neoplastic lesions were observed in the chronic toxicity study. There is no positive correlation between nitrate intakes and the incidence of cancer.

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Potassium sulfate: Although no carcinogenicity study seems to be required for potassium sulphate as the substance is not genotoxic, a reliable chronic/carcinogenicity study is available for ammonium sulphate. No evidence of a carcinogenic potential was observed in this study with rats following closely the requirements of OECD testguideline 453.

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Ammonium Nitrate: No Data Available.

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Potassium phosphate Monobasic: A number of recent publications have hypothesised a link between very high or very low dietary phosphate levels and tumourigenesis (typically using potassium or sodium orthophosphates as the test substance). The most recent publications have been included as a representation of the typical investigations performed in this area. These data are not sufficient to fulfil the guideline requirement for carcinogenicity and are not considered to be adequate or reliable for use in risk assessment and/or classification and labelling. As such these studies are provided for completeness of the data set only.

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Magnesium sulfate anhydrous: No relevant data found.

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Calcium nitrate tetrahydrate: No Data Available.

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Thiamine Hydrochloride: No Data Available.

### **Reproductive toxicity**

As Mixture: No data Available

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Potassium nitrate: Based on the results of a combined repeated dose toxicity study with a reproduction/developmental toxicity screening performed according to OECD 422 guideline and GLP principles, the NOAEL of potassium nitrate was found to be  $\geq 1,500$  mg/kg/day for developmental toxicity. According to Annex I of Regulation (EC) No. 1272/2008 potassium nitrate is not classified based on the available data

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Potassium sulfate: A reliable subacute oral toxicity study available on potassium sulphate shows a NOAEL of 1500 mg/kg bw/day, the highest dose tested. The study was performed according to OECD 422. In addition, repeated dose toxicity data on ammonium sulphate are considered. The 90-day oral study in rats showing a NOAEL of 886 mg/kg bw/day (LOAEL 1792 mg/kg bw/day) and the chronic oral toxicity study in rats showing a NOAEL of 256 mg/kg bw/day (LOAEL 1527 mg/kg bw/day). Based on these reliable studies with potassium sulphate and ammonium sulphate for oral repeated dose toxicity, the rat oral NOAEL for the sulphate category is 1500 mg/kg bw/day for subacute toxicity. For chronic toxicity the NOAEL for the sulphate category is 256 mg/kg bw/day.

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Ammonium Nitrate: No reliable study with ammonium nitrate is present. In a reliable OECD 422 screening study in rats with potassium nitrate no effects were found up to the highest dose tested (1500 mg/kg bw/d). In addition, in repeated dose studies with potassium nitrate and ammonium sulfate no effects on reproduction organs were found. Ammonium nitrate dissociates into NH<sub>4</sub><sup>+</sup> and nitrate ions. Nitrates are regulated within the body. The ammonium cation is not an essential ion, but a waste product from animal metabolism that is re-used in protein synthesis via glutamate. Depending on the species, ammonium will be directly excreted to the environment or converted to urea, which is less toxic. Together with the available data showing no effects, an additional study is therefore not considered necessary. The overall conclusion for ammonium nitrate is that the substance may not present a risk for reproductive toxicity.

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Potassium phosphate Monobasic: One key study is available for the endpoint '8.7.2. Developmental toxicity study'. This study assesses the teratogenic potential of potassium dihydrogenorthophosphate (Bailey, 1975) in rats and mice. This study is considered to be adequate to fulfil this endpoint. In addition, supporting data on an additional analogous substance; sodium dihydrogenorthophosphate is also provided to support the lack of developmental toxicity potential of sodium and potassium orthophosphates as a group of chemicals.

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Magnesium sulfate anhydrous: No reliable study on magnesium sulphate is available. In a reliable OECD screening study in rats with potassium sulphate no effects were found up to the highest dose tested (1500 mg/kg bw/d). No further studies with potassium sulphate itself were present. However, in repeated dose studies with ammonium sulphate no effects on reproduction organs were found and in addition in a limited one-generation study where only females were treated with sodium sulphate no effects were found. In addition, magnesium sulphate dissociates into Mg<sup>2+</sup> and sulphate ions which are nutritional components regulated by the body. The overall conclusion for magnesium sulphate is that there is no evidence that the substance may present a risk for developmental toxicity.

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Calcium nitrate tetrahydrate: No reliable study with calcium nitrate is present. In a reliable OECD 422 screening study in rats with potassium nitrate no effects were found up to the highest dose tested (1500 mg/kg bw/d). In addition, in repeated dose studies with potassium nitrate and Nitcal-K no effects on reproduction organs were found. Calcium nitrate dissociates into Ca<sup>2+</sup> and nitrate ions. Nitrates are regulated within the body. Ca<sup>2+</sup> is also a necessary element of which the accepted daily dose is 1-2.5 g/day (Dutch Voedingscentrum). Together with the available data showing no effects, an additional study is therefore not considered necessary. The overall conclusion for calcium nitrate is that there is no evidence that the substance may present a risk to fertility.

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Thiamine Hydrochloride: Under the conditions of this study, the No Observed Adverse Effect Level (NOAEL) of the test material is at least 1000 mg/kg/day for parental, reproduction and developmental toxicity. In accordance with the criteria for classification as defined in Annex I, Regulation (EC) No 1272/2008, the substance does not require classification with respect to reproductive and developmental toxicity.

#### Summary of evaluation of the CMR properties

As Mixture: No data Available

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Potassium nitrate: No CMR Classification.

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Potassium sulfate: No CMR classification.

### **STOT-single exposure**

As Mixture: No data Available

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Potassium nitrate: No STOT SE toxicity.

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Potassium sulfate: No STOT SE classification

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Ammonium Nitrate: No STOT SE Toxicity.

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Potassium phosphate Monobasic: No STOT SE Toxicity

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Magnesium sulfate anhydrous: No STOT SE Classification.

### **STOT-repeated exposure**

As Mixture: No data Available

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Potassium nitrate: No STOTO RE Toxicity.

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Potassium sulfate: No STOT RE classification

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Ammonium Nitrate: No STOT RE Toxicity.

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Potassium phosphate Monobasic: No STOT RE toxicity

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Magnesium sulfate anhydrous: No STOT RE Classification.

### **Aspiration hazard**

As Mixture: No data Available

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Potassium nitrate: Not Applicable.

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Potassium phosphate Monobasic: Not applicable

### **Additional information**

No Data Available.

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## **SECTION 12: Ecological information**

### **Toxicity**

As Mixture: No data Available

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Potassium nitrate: Fish LC50>100 mg/L, NOEC 58mg/L

Daphnia Magna EC50>100 mg/L

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Potassium sulfate: Fish (Fathead minnow) showed a 96hr LC50 of 680 mg/L.  
Daphnia magna showed a 48 hr EC50 of 720 mg/L.

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Ammonium Nitrate: Fish LC50>100 mg/L, NOEC 58 mg/L  
Daphnia Magna EC50>100 mg/L  
Algae EC50>100 mg/L, NOEC 100 mg/L

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Magnesium sulfate anhydrous: No reliable data on acute toxicity to fish are available for magnesium sulphate. Based on a reliable study on potassium sulphate the LC50 for freshwater fish for the sulfate category is 680 mg/L. No reliable study is present for magnesium sulphate. Based on a reliable study with ammonium sulphate and the results being confirmed by studies with potassium and magnesium sulphate, the EC50 for freshwater algae is determined to be 2700 mg/L and the NOEC is  $\geq$  100 mg/L.

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Calcium nitrate tetrahydrate: Fish LC50>100 mg/L, NOEC 58 mg/L  
Daphnia Magna EC50>100 mg/L  
Algae EC50 >100 mg/L, NOEC 100 mg/L.

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Thiamine Hydrochloride: Fish LC50>100 mg/L  
Daphnia Magna EC50>100 mg/L  
Algae EbC50>100 mg/L

#### **Persistence and degradability**

As Mixture: No data Available

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Potassium nitrate: Readily biodegradation study does not need to be conducted since the substance is an inorganic salt (Annex VII REACH). In addition, biodegradation of nitrate can occur under anaerobic conditions, both under natural conditions and as a controlled process in many wastewater treatment plants, resulting in degradation products like nitrite, oxide of nitrogen, nitrogen, or ammonia. Nitrate degradation is fastest in anaerobic conditions. In the anaerobic transformation of nitrate into N<sub>2</sub>, N<sub>2</sub>O and NH<sub>3</sub>, the biodegradation rate in wastewater plant at 20 degrees Celsius is 70 g N/kg dissolved solid/day.

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Potassium sulfate: Due to the inorganic nature of the substance standard testing systems are not applicable.

Sulfates can be retained in soil, both by incorporation into organic matter (e.g. as sulfate esters of humic acids) and adsorbed to soil particles such as hydrous iron and aluminum sesquioxides.

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Ammonium Nitrate: Ready biodegradation studies do not need to be conducted since the substance is inorganic (Annex VII REACH). In addition, in the anaerobic transformation of ammonium, one group of bacteria oxidizes ammonium to nitrite while another group oxidizes nitrite into nitrate. The average biodegradation rate in wastewater plant at 20 degrees Celsius is 52 g N/kg dissolved solid/day. Nitrate degradation is fastest in anaerobic conditions. In the anaerobic transformation of nitrate into N<sub>2</sub>, N<sub>2</sub>O and NH<sub>3</sub>, the biodegradation rate in wastewater plant at 20 degrees Celsius is 70 g N/kg dissolved solid/day.

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Potassium phosphate Monobasic: Potassium dihydrogenorthophosphate is an inorganic substance, biodegradation studies are not applicable. No further testing is deemed to be necessary.

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Calcium nitrate tetrahydrate: Readily biodegradation study does not need to be conducted since the substance is inorganic (Annex VII REACH). In addition, biodegradation of nitrate can occur under anaerobic conditions, both under natural conditions and as a controlled process in many wastewater treatment plants, resulting in degradation products like nitrite, oxide of nitrogen, nitrogen, or ammonia. Nitrate degradation is fastest in anaerobic conditions. In the anaerobic transformation of nitrate into N<sub>2</sub>, N<sub>2</sub>O and NH<sub>3</sub>, the biodegradation rate in wastewater plant at 20 degrees Celsius is 70 g N/kg dissolved solid/day.

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Thiamine Hydrochloride: readily biodegradable

### **Bioaccumulative potential**

As Mixture: No data Vailable

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Potassium nitrate: Simple inorganic salts with high aqueous solubility will exist in a dissociated form in an aqueous solution. Such a substance has a low potential for bioaccumulation.

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Potassium phosphate Monobasic: No experimental data on bioaccumulation exist. However due to the hydrophilic nature of the substance, bioaccumulation is not expected as accumulation in fats is not possible. The substance when dissolved in water (and so animal tissues/fluids) will effectively separate into/become simply the two ions "phosphate" and "potassium" which are natural ionic components of blood, cell fluids, etc and therefore no further testing is considered to be necessary. In addition, no risk of secondary poisoning is anticipated for the same reasons. The potential for bioaccumulation is therefore considered to be minimal.

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Magnesium sulfate anhydrous: No potential for bioaccumulation.

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Thiamine Hydrochloride: No Data Available.

### **Mobility in soil**

As Mixture: No data Vailable

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Potassium nitrate: No Data Available.

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Potassium sulfate: No data available.

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Potassium phosphate Monobasic: No Data Found

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Magnesium sulfate anhydrous: No relevant information found.

### **Results of PBT and vPvB assessment**

As Mixture: No data Vailable

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Potassium nitrate: No Data Available.

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Potassium sulfate: No data available.

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Potassium phosphate Monobasic: No potential for bioaccumulation

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Magnesium sulfate anhydrous: No relevant information found.

### Other adverse effects

As Mixture: No data Available

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Potassium phosphate Monobasic: Potassium dihydrogenorthophosphate is not considered to pose a risk to the environment and as such is neither classified as harmful nor dangerous to the environment, in accordance with Regulation (EC) No. 1272/2008 (EU CLP).

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## SECTION 13: Disposal considerations

### Disposal of the product

Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

### Disposal of contaminated packaging

Dispose of as unused product.

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## SECTION 14: Transport information

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

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## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

#### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

Water

CAS-No. 7732-18-5

#### New Jersey Right To Know Components

Water

CAS-No. 7732-18-5

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### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### Canadian Domestic Substances List (DSL)

Chemical name: Water

CAS: 7732-18-5

### New Jersey Right To Know Components

Common name: POTASSIUM NITRATE

CAS number: 7757-79-1

### Pennsylvania Right To Know Components

Chemical name: Nitric acid, potassium salt

CAS number: 7757-79-1

### Canadian Domestic Substances List (DSL)

Chemical name: Nitric acid potassium salt

CAS: 7757-79-1

### Canadian Domestic Substances List (DSL)

Chemical name: Sulfuric acid dipotassium salt

CAS: 7778-80-5

### New Jersey Right To Know Components

Common name: AMMONIUM NITRATE

CAS number: 6484-52-2

### Pennsylvania Right To Know Components

Chemical name: Nitric acid, ammonium salt

CAS number: 6484-52-2

### Canadian Domestic Substances List (DSL)

Chemical name: Nitric acid ammonium salt

CAS: 6484-52-2

### Canadian Domestic Substances List (DSL)

Chemical name: Phosphoric acid, monopotassium salt

CAS: 7778-77-0

### Canadian Domestic Substances List (DSL)

Chemical name: Phosphoric acid, potassium salt

CAS: 16068-46-5

### Canadian Domestic Substances List (DSL)

Chemical name: Sulfuric acid magnesium salt (1:1)

CAS: 7487-88-9

### Canadian Domestic Substances List (DSL)

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Chemical name: Sulfuric acid magnesium salt (1:1), heptahydrate  
CAS: 10034-99-8

### **New Jersey Right To Know Components**

Common name: CALCIUM NITRATE  
CAS number: 10124-37-5

### **Canadian Domestic Substances List (DSL)**

Chemical name: Nitric acid, calcium salt  
CAS: 10124-37-5

### **Canadian Domestic Substances List (DSL)**

Chemical name: Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl- chloride, monohydrochloride  
CAS: 67-03-8

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## **SECTION 16: Other information**

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