

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product identifier:**

**Product form:** Substance.  
**Trade name:** HORTIPRAY CALCIUM NITRATE.  
**Chemical name:** Nitric acid, ammonium calcium salt  
**EC no:** 239-289-5  
**CAS No:** 15245-12-2  
**REACH registration No:** 01-2119493947-16-XXXX  
**Formula:**  $5\text{Ca}(\text{NO}_3)_2 \cdot \text{NH}_4 \text{NO}_3 \cdot 10\text{H}_2\text{O}$   
**Product group:** Solid.

**Relevant identified uses of the substance or mixture and uses advised against:**

**Relevant identified uses:**

**Use of the substance/mixture:** Fertilizer.

**Uses advised against:**

Title	Use descriptors	Reason
HORTIPRAY NITRATE DE CALCIUMX		None

Full text of use descriptors: see section 16

**Company name:** Nexchem Ltd  
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**2. HAZARDS IDENTIFICATION**

**Classification of the substance or mixture:**

**Classification according to Regulation (EC) No. 1272/2008 [CLP]:**

Eye Dam. 1 H318  
Acute Tox. 4 (Oral) H302

Full text of H-phrases: see section 16.

**Classification according to Directive 67/548/EEC or 1999/45/EC:**

Xn; R22  
Xi; R41

Full text of R-phrases: see section 16.

[cont...]

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**Adverse physicochemical, human health and environmental effects:** No additional information available.

**Label elements:**

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]:**

**Hazard pictograms (CLP):**



GHS05



GHS07

**Signal word (CLP):** Danger

**Hazard statements (CLP):** H302 - Harmful if swallowed.  
H318 - Causes serious eye damage.

**Precautionary statements (CLP):** P264: Wash thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves, protective clothing, eye protection, face shield.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER or doctor/physician.  
P330 - Rinse mouth.

**Other hazards:** This substance/mixture does not meet the PBT criteria of REACH, annex XIII.  
This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Mixture:** Not applicable

## 4. FIRST AID MEASURES

**Description of first aid measures:**

**First-aid measures after inhalation:** Seek medical advice if symptom persists. Remove victim to fresh air.

**First-aid measures after skin contact:** Wash immediately with plenty of soap and water.

**First-aid measures after eye contact:** In case of eye contact, immediately rinse with clean water for 10-15 minutes. Keep eyelids widely open. Take medical advice immediately.

**First-aid measures after ingestion:** If swallowed, rinse mouth with water (only if the person is conscious). Give nothing to drink. Do not induce vomiting. Seek medical advice if symptom persists. Warning if ingestion by an infant.

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## Most important symptoms and effects, both acute and delayed:

**Symptoms/injuries after inhalation:** Irritating vapours may be released. Toxic and corrosive vapours may be released.

Hazardous decomposition products. Effects on the lungs may occur with delay. Place under medical control until minimum 48 hours.

**Symptoms/injuries after skin contact:** Redness. Blisters. Pain. Irritation.

**Symptoms/injuries after eye contact:** Causes serious eye damage.

**Symptoms/injuries after ingestion:** Harmful: possible risk of irreversible effects if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Indication of any immediate medical attention and special treatment needed:** See Heading 4.1.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media:

**Suitable extinguishing media:** Large quantity of water. Powders. CO<sub>2</sub>.

**Unsuitable extinguishing media:** Foam. Water spray. Dry sand.

### Special hazards arising from the substance or mixture:

**Fire hazard:** Contact with combustible material may cause fire. Thermal decomposition generates toxic vapours.

### Advice for firefighters:

**Protection during firefighting:** Use an autonomous respiratory protection. Wear a waterproof chemical protective clothing and adequate gloves.

## 6. ACCIDENTAL RELEASE MEASURES

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

**General measures:** In the event that dust and/or fine particles are generated with this product, it is prudent to minimize prolonged inhalation exposure to these forms not to exceed the occupational exposure limit. Wear respiratory protection. Wearing of safety glasses necessary.

**For non-emergency personnel:** No additional information available.

**For emergency responders:** No additional information available

**Environmental precautions:** Prevent entry to sewers, soils and natural waters.

### Methods and material for containment and cleaning up:

**Methods for cleaning up:** On land, sweep or shovel into suitable containers. Avoid dust production. Rinse with plenty of water.

**Reference to other sections:** See section 8 and 13 for more information.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Do not allow contamination by any foreign material. Avoid dust production. Wear suitable protective clothing, gloves and eye or face protection. (see section(s) :8).

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## Conditions for safe storage, including any incompatibilities:

**Storage conditions:** Keep away from heat. Keep away from sources of ignition - No smoking. Store in dry, cool, well-ventilated area. Keep away from combustible material, reducing agents, strong bases.

**Specific end use(s):** No additional information available

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters:

#### HORTIPRAY CALCIUM NITRATE(15245-12-2):

Belgium Limit value (mg/m<sup>3</sup>) Respirable: 3 mg/m<sup>3</sup>. Inhalable: 10 mg/m<sup>3</sup>

#### HORTIPRAY CALCIUM NITRATE(15245-12-2):

##### DNEL/DMEL (Workers):

Long-term - systemic effects, dermal 13,9 mg/kg bodyweight/day  
Long-term - systemic effects, inhalation 98 mg/m<sup>3</sup> DNEL/DMEL (General population)

#### HORTIPRAY CALCIUM NITRATE(15245-12-2):

Long-term - systemic effects, oral 8,33 mg/kg bodyweight/day  
Long-term - systemic effects, inhalation 25,2 mg/m<sup>3</sup>  
Long-term - systemic effects, dermal 8,33 mg/kg bodyweight/day  
PNEC (Water) PNEC aqua (freshwater) 0,45 mg/l  
PNEC aqua (marine water) 0,045 mg/l  
PNEC aqua (intermittent, freshwater) 4,5 mg/l  
PNEC (STP) PNEC sewage treatment plant 18 mg/l

### Exposure controls:

**Appropriate engineering controls:** Provide adequate ventilation to minimize dust concentrations. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Eye protection:** Safety glasses with side shields.

**Respiratory protection:** Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material (Type FFP2 in accordance with EN 140 or 149).

**Environmental exposure controls:** Avoid release to the environment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties:

**Physical state:** Granular solid.  
**Colour:** Light brown. white.  
**Odour:** Odourless.  
**Odour threshold:** No data available.  
**pH:** 5 - 7  
**Relative evaporation rate (butyl acetate=1):** No data available.

[cont...]

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<b>Melting point:</b>	400 °C
<b>Freezing point:</b>	No data available.
<b>Boiling point:</b>	90 °C
<b>Flash point:</b>	Not applicable.
<b>Self-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Vapour pressure:</b>	No data available.
<b>Relative vapour density at 20 °C:</b>	No data available.
<b>Relative density:</b>	2,05
<b>Density:</b>	1100 - 1200 kg/m <sup>3</sup>
<b>Solubility:</b>	Material highly soluble in water. Water: > 100 g/l 20°C
<b>Log Pow:</b>	No data available.
<b>Viscosity, kinematic:</b>	No data available.
<b>Viscosity, dynamic:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidising properties:</b>	No data available.
<b>Explosive limits:</b>	No data available.
<b>Other information:</b>	No additional information available.

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Oxidising substances. Risk of explosion if heated under confinement. Stable under normal conditions (Handling and storage).
<b>Chemical stability:</b>	Stable under normal conditions (Handling and storage).
<b>Possibility of hazardous reactions:</b>	No.
<b>Conditions to avoid:</b>	Keep away from : Oxidizing agent. Fire. Sparks. Incompatible materials. Heat.
<b>Incompatible materials:</b>	Reducing agent. combustibles. Nitrogen oxides. ammonia. (organic substances). Metal powder.
<b>Hazardous decomposition products:</b>	Nitrogen oxides(NOx). Toxic fumes. Carbon oxides (CO, CO2).

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects:

**Acute toxicity:** Harmful if swallowed.

### HORTIPRAY CALCIUM NITRATE(15245-12-2):

LD50 oral rat > 300 mg/kg

LD50 dermal rat > 2000 mg/kg

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**Skin corrosion/irritation:** Not irritating.  
pH: 5 - 7

**Serious eye damage/irritation:** Corrosive. rabbit. OECD 405  
pH: 5 - 7

**Respiratory or skin sensitisation:** Did not cause sensitisation.

**Germ cell mutagenicity:** Not mutagenic. Negative /OECD 471. Negative/OECD 473

**Carcinogenicity:** Not a carcinogen suspected agent.

**Reproductive toxicity:** Reproductive toxicity Not classified. Rat.

**Specific target organ toxicity (single exposure):** Not classified.

**Specific target organ toxicity (repeated exposure):** Not classified.

**Aspiration hazard:** Not classified.

## 12. ECOLOGICAL INFORMATION

### Toxicity:

#### HORTIPRAY CALCIUM NITRATE(15245-12-2):

LC50 fishes 1 477 mg/l 48h  
EC50 Daphnia 1 > 100 mg/l 48h  
ErC50 (algae) > 100 mg/l ( 72 -Hours)

### Persistence and degradability:

#### HORTIPRAY CALCIUM NITRATE(15245-12-2):

**Persistence and degradability:** Complete dissociation in the presence of water.

### Bioaccumulative potential:

#### HORTIPRAY CALCIUM NITRATE(15245-12-2):

**Bioaccumulative potential:** Not bioaccumulable.

### Mobility in soil:

#### HORTIPRAY CALCIUM NITRATE(15245-12-2):

**Ecology – soil:** No data available.

### Results of PBT and vPvB assessment:

#### HORTIPRAY CALCIUM NITRATE(15245-12-2):

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

**Results of PBT assessment:** Not relevant.(inorganic substance).

**Other adverse effects:** Nitrate may cause a eutrophication of natural water.

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## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods:

**Waste treatment methods:** Comply with local regulations for disposal.

**Additional information:** Empty packaging can have residues or dusts and are subject to proper waste disposal, as above.

**Ecology - waste materials:** See the European waste catalogue.

**EURAL code:** 06 03 14 - solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13.

## 14. TRANSPORT INFORMATION

### In accordance with ADR / RID / IMDG / IATA / ADN:

**UN number:** No dangerous good in sense of transport regulations.

**UN proper shipping name:** Not applicable.

**Transport hazard class(es):** Not applicable.

**Packing group:** Not applicable.

### Environmental hazards:

**Other information:** No supplementary information available.

### Special precautions for user:

**Overland transport:** No additional information available.

**Transport by sea:** No additional information available.

**Air transport:** No additional information available.

**Inland waterway transport:** No additional information available.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable.

## 15. REGULATORY INFORMATION

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

**EU-Regulations:** No REACH Annex XVII restrictions.  
Contains no REACH candidate substance.

**National regulations:** No additional information available.

**Chemical safety assessment:** No additional information available.

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

[cont...]

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## 16. OTHER INFORMATION

**Indication of changes:** According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010.

ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways.

ADR: European Agreement concerning international carriage of Dangerous goods by Road.

AF: Assessment factor BCF : Bioconcentration factor Bw: Body weight.

CAS: Chemical Abstracts Service.

CLP: Classification, labelling, packaging.

CSR: Chemical Safety Report.

DMEL: Derived maximum effect level.

DNEL: Derivative No effect Level.

EC: European Community.

ELV: Emission limit values.

EN: European Norm.

EUH: European Hazard Statement.

EWC: European Waste catalogue.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Dangerous Goods.

LC50: Median lethal concentration.

LD50: Median lethal dose.

NOAEL: No-observed-adverse-effect-level.

NOEC: No observed effect concentration.

NOEL: No observed effect level.

OEL: Operator exposure level.

PBT: Persistent, bioaccumulative, Toxic.

PEC: Predicted effect level.

PNEC: Predicted No effect Concentration.

REACH: Registration, evaluation and authorisation of chemicals.

RID: Regulations concerning the international carriage of dangerous goods by rail.

STEL: Short Term Exposure Limit.

TWA: Time weighted average.

vPvB: Very persistent, very bioaccumulative.

### Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1.
H302	Harmful if swallowed.
H318	Causes serious eye damage.
R22	Harmful if swallowed.
R41	Risk of serious damage to eyes.
Xi	Irritating.
Xn	Harmful.

[cont...]



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**Legal disclaimer:**

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.