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

1.1 Product Identifier:

Trade Name: Calcium
Chemical Name: nitric acid, ammonium calcium salt

EC No. 239-289-5
CAS No. 15245-12-2
REACH Registration No. 01-2119493947-16-00XX

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

Supplied for use as a fertilizer

1.3 Details of the supplier of the safety data sheet:

Chempak Products
Thompson & Morgan
Poplar Lane
Ipswich
Suffolk
IP8 3BU

Contact: The Safety Officer

Telephone Number: 01473 588688 (Monday – Friday 8am to 5pm)
Or visit www.chempak.com

1.4 Emergency telephone number:

Emergency Telephone Number: 01473 588688 (Monday – Friday 8am to 5pm)

2. Hazards identification

2.1 Classification of the substance or mixture

CLASSIFICATION according to Directive EC 1272/2008 Classification, Labelling and Packaging

Eye Dam. 1; H318 Causes serious eye damage

Acute Tox. 4 (Oral); H302 Harmful if swallowed

CLASSIFICATION according to Directive 1999/45/EC and statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulation

Xn; R22 Harmful if swallowed
Xi; R41 Risk of serious damage to eyes

2.2 Label Elements

According to EC 1272/2008

Pictograms:

Signal Word: Danger

Hazard statements:
H302 – Harmful if swallowed
H318 – Causes serious eye damage

Precautionary statements:
P264 – Wash hands thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P280 – Wear protective gloves/protective clothing/eye protection/face shield
P301 + P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P501 – Dispose of contents/container in accordance with local regulation.

2.3 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

3.1 Substances
Hazardous components

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s)	Phrase(s)	Concentration [%]
Nitric Acid, Ammonium Calcium Salt	15245-12-2 239-289-5	01-2119493947-16-00XX	According to 1272/2008: GHS07  GHS05  According to 67/548/EEC:  HARMFUL IRRITANT	According to 1272/2008: Acute Tox. 4 (Oral); H302 Eye Dam. 1; H318 According to 67/548/EEC: R22 R41	100

All hazard information if not displayed in section 2 or 3 is displayed in Section 16.

4. First aid measures

4.1 Description of first aid measures

4.1.1 Inhalation
Keep patient calm, remove to fresh air and seek medical attention if symptoms persist.

4.1.2 Skin & Eye exposure
Skin: Wash immediately with plenty of soap and water.
Eyes: Rinse thoroughly with plenty of water for at least 15 minutes. Keep eyelids wide open. Seek medical attention immediately.

4.1.3 Ingestion
If swallowed, rinse mouth with water (only if the person is conscious). Give nothing to drink. Do not induce vomiting. Seek medical attention is symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed
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.
Skin contact: Redness. Blisters. Pain. Irritation.
Eye contact: Causes serious eye damage.
Ingestion: Harmful; possible risk of irreversible effects if swallowed. May cause burns or irritation of the lining of the mouth, throat and gastrointestinal tract.

4.3 Indication of any immediate medical attention and special treatment needed.
See section 4.1.

5. Firefighting measures

5.1 Extinguishing media
Large quantity of water; powders; CO_2

5.2 Special Hazards arising from the substance or mixture
Contact with combustible material may cause fire. Thermal decomposition generates toxic vapours.

5.3 Advice for fire-fighters
Wear self-contained breathing apparatus. Wear waterproof chemical protective clothing and adequate gloves.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
In the event that dust and/or fine particles are generated with this product, it is prudent to minimise prolonged inhalation exposure to these forms so as not to exceed the occupational exposure limit. Wear respiratory protection. Wearing of safety glasses absolutely necessary.

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

6.3 Methods and material for containment and cleaning up
On land, sweep or shovel into suitable containers. Avoid dust production. Rinse with plenty of water.

6.4 Reference to other sections
For personal protection see section 8. For disposal considerations, see section 13.

7. Handling and storage

7.1 Precaution 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 8)

7.2 Conditions for safe storage, including any incompatibilities
Keep away from heat. Keep away from sources of ignition - No smoking. Keep away from combustible material, reducing agents, and strong bases. Store in a dry, cool, well-ventilated area.

7.3 Specific end use(s)
No additional information available.

8. Exposure controls and personal protection

8.1 Control Parameters

Belgium Limit Value (mg/m^3) Respirable: $3mg/m^3$. Inhalable: $10mg/m^3$

DNEL/DMEL (Workers)

Long-term – systemic effects, dermal	13.9mg/kg bodyweight/day
Long-term – systemic effects, inhalation	$98mg/m^3$

DNEL/DMEL (General Population)

Long-term – systemic effects, oral	8.33mg/kg bodyweight/day
Long-term – systemic effects, inhalation	$25.2\ mg/m^3$
Long-term – systemic effects, dermal	8.33mg/kg bodyweight/day

PNEC (Water)

PNEC aqua (freshwater)	0.45mg/l
PNEC aqua (marine water)	0.045mg/l
PNEC aqua (intermittent, freshwater)	4.5mg/l

PNEC (STP)

PNEC sewage treatment plant	18mg/l

8.2 Exposure controls

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

Personal protection: Safety glasses with side shields. 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

9.1 Information on basic physical and chemical properties
Appearance; Light brown/white granular solid
Odour; Odourless
Odour threshold; Information not available
pH; 5 - 7
Melting point; 400˚C
Initial boiling point; 90 ˚C
Flash point; Not applicable
Evaporation rate; Information not available
Flammability (solid, gas); Information not available
Upper /lower flammability or explosive limits; Information not available
Vapour Pressure; Information not available
Vapour density; Information not available
Relative density; 2.05
Density; 1100-1200 kg/m^3
Specific gravity; Information not available
Solubility (ies); Material highly soluble in water. Water: >100g/l 20˚C
Partition coefficient: n-octanol/water; Information not available
Auto ignition temperature: Information not available
Decomposition temperature: Information not available

9.2 Other Information
No additional information available.

10. Stability and reactivity

10.1 Reactivity
Oxidising substances. Risk of explosion if heated under confinement. Stable under normal handling and storage conditions.

10.2 Chemical Stability
Stable under normal handling and storage conditions.

10.3 Possibility of hazardous reactions
Information not available.

10.4 Conditions to avoid
Keep away from oxidizing agents, heat, fire, sparks, incompatible materials.

10.5 Incompatible materials
Reducing agents, combustibles, Nitrogen oxides, ammonia (organic substances), metal powder.

10.6 Hazardous decomposition products
Nitrogen oxides, toxic fumes, carbon oxides.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:	Harmful if swallowed
LD50 oral rat:	>300mg/kg
LD50 dermal rat:	>2000mg/kg
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:	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

12.1 Toxicity

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

12.2 Persistence and degradability
Complete dissociation in the presence of water.

12.3 Bioaccumulative potential
Bioaccumulation will not occur.

12.4 Mobility in soil
Information not available

12.5 Results of PBT and vPvB
Not classified

12.6 Other adverse effects
Nitrate may cause an eutrophication of natural water.

13. Disposal considerations

13.1 Waste Treatment Methods
Comply with local regulations for disposal. Empty packaging can have residues or dusts and are subject to proper waste disposal.

14. Transport information

14.1 UN number: Non-dangerous goods

14.2 UN proper shipping name: No information available

14.3 Transport hazard: No information available

14.4 Packing group: No information available.

14.5 Environmental hazards: No information available.

14.6 Special precautions for user: No Information available

14.8 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: No information available

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. This substance/mixture is classified and labelled in accordance with Regulation EC 1272/2008, Directive 1999/45/EC, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations and the EC Fertiliser Regulations 2003, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2 Chemical Safety Assessment
No information available.

16. Other information

SDS information:

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, Regulation 1272/2008 and Annex I of the REACH Regulation 453/2010.
The information given herein is, to the best of our knowledge, correct and is presented in good faith but no warranty, expressed or implied is given.

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