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SAFETY DATA SHEET

YaraTera CALCINIT

Section 1. Identification

Product name : YaraTera CALCINIT
 Product type : solid (Granular solid.)
 Product code : PA34OG

Uses

Area of application : Professional applications
 Material uses : Fertilizers.

Supplier

Supplier's details : Yara Fertilizers (New Zealand) Limited

Address

Street : 43 Plassey Street
 Postal code : 4130
 City : Havelock North
 Country : New Zealand

P.O. Box Address

P.O. Box : 8746
 Postal code : 4157
 City : Havelock North
 Country : New Zealand

Telephone number : +64 6 877 6600
 Fax no. : +64 6 877 6610
 e-mail address of person responsible for this SDS : info.yara@xtra.co.nz
 Emergency telephone number (with hours of operation) : +64 9929 1483 (7/24)

National advisory body/Poison Center

Name : New Zealand National Poisons Centre
 Telephone number : 0800 POISON = 0800 764 766 (NZ only) / +64 3 479 7248 (outside NZ)
 Hours of operation : 24h

Section 2. Hazards identification

HSNO Classification : 6.1 - ACUTE TOXICITY (oral) - Category D
 6.1 - ACUTE TOXICITY (dermal) - Category E
 8.3 - CORROSIVE TO OCULAR TISSUE - Category A

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: H302 Harmful if swallowed.
 H313 May be harmful in contact with skin.
 H318 Causes serious eye damage.

Precautionary statements

Prevention

: P280 Wear protective gloves and eye protection.
 P270 Do not eat, drink or smoke when using this product.

Response

: P264-a Wash hands thoroughly after handling.
 P305 IF IN EYES:
 P351 Rinse cautiously with water for several minutes.
 P338 Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P301 IF SWALLOWED:
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.
 P330 Rinse mouth.

Other hazards which do not result in classification

: Product forms slippery surface when combined with water.

Section 3. Composition/information on ingredients

Substance/mixture

: Substance

CAS number/other identifiers

Other means of identification

: Nitric acid, ammonium calcium salt

CAS number

: 15245-12-2

EC number

: 239-289-5

Ingredient name	CAS number	% (w/w)
Nitric acid, ammonium calcium salt	15245-12-2	100

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier

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and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, keeping eyelids open. Get medical attention immediately. Rinse with plenty of running water. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.
- Inhalation** : If inhaled, remove to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
- Skin contact** : Wash with soap and water. Gently wash with plenty of soap and water. Do not rub affected area. Continue to rinse for at least 10 minutes. Get medical attention if irritation develops.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if you feel unwell. Get medical attention if adverse health effects persist or are severe.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May be harmful in contact with skin.
- Ingestion** : Harmful if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : Not available.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use flooding quantities of water for extinction.

Unsuitable extinguishing media : Do NOT use chemical extinguisher or foam or attempt to smother the fire with steam or sand.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
nitrogen oxides
Avoid breathing dusts, vapors or fumes from burning materials.
In case of inhalation of decomposition products in a fire, symptoms may be delayed.
ammonia

Hazchem or Emergency Action Code : Not available.

Remark : Non-flammable substance.

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : Non-explosive.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8). If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Not for human or animal consumption.

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved

Protective measures	<p>alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.</p> <p>: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Product forms slippery surface when combined with water.</p>
Advice on general occupational hygiene	<p>: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</p>
Conditions for safe storage, including any incompatibilities	<p>: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Keep away from: organic materials, oil and grease.</p>


Section 8. Exposure controls/personal protection

Control parameters

<u>Occupational exposure limits</u>	: None.
Appropriate engineering controls	: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of

environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : A washing facility or water for eye and skin cleaning purposes should be present. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Recommended: Tightly-fitting goggles,
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
> 8 hours (breakthrough time): Viton®, neoprene
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
- Respiratory protection** : In case of inadequate ventilation wear respiratory protection. Recommended Approved/certified disposable particulate dust mask.
- Personal protective equipment (Pictograms)** : 

Section 9. Physical and chemical properties

Appearance

- Physical state** : solid [Granular solid.]
- Color** : White.,
- Odor** : Odorless.
- Odor threshold** : Not determined.
- pH** : 5 - 7 [Conc.: 110 g/l]
- Melting/freezing point** : 400 °C
- Boiling/condensation point** : Not determined.
- Sublimation temperature** : Not determined.
- Flash point** : Not determined.
- Fire point** : Not determined.
- Evaporation rate** : Not determined.
- Flammability (solid, gas)** : Non-flammable.

- Lower and upper explosive** : **Lower:** Not determined.

(flammable) limits	Upper: Not determined.
Vapor pressure	: Not determined.
Bulk density	: 1,100 kg/m ³
Relative density	: 2.05
Solubility	: 100 g/l @ 20 °C(68 °F) Easily soluble in the following materials: cold water
Solubility in water	: > 100 g/l
Partition coefficient: n-octanol/water	: Not determined.
Auto-ignition temperature	: Not determined.
Decomposition temperature	: Not determined.
Viscosity	: Dynamic: Not determined. Kinematic: Not determined.
Explosive properties	: Non-explosive.
Oxidizing properties	: None

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid contamination by any source including metals, dust and organic materials.
Incompatible materials	: alkalis combustible materials reducing materials organic materials Acids
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredie	Method	Species	Result	Exposure	References
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nt name					
Nitric acid, ammonium calcium salt					
	OECD 423 LD50 Oral	Rat	500 mg/kg	Not applicable.	CSR
	OECD 402 LD50 Dermal	Rat	2,000 - 5,000 mg/kg	Not applicable.	

Conclusion/Summary : Harmful if swallowed. May be harmful in contact with skin.

Irritation/Corrosion

Product/ingredient name	Method	Species	Result	Exposure	References
Nitric acid, ammonium calcium salt					
	OECD 405 Eyes	Rabbit	Damage	24 - 72 h	CSR

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Eyes : Causes serious eye damage.

Respiratory : No known significant effects or critical hazards.

Sensitization

Conclusion/Summary

Skin : Not sensitizing

Respiratory : Not determined.

Mutagenicity

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

No known significant effects or critical hazards.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact : May be harmful in contact with skin.
Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 pain
 watering
 redness
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
Ingestion : Adverse symptoms may include the following:
 stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Method	Species	Result	Exposure	References
Nitric acid, ammonium calcium salt					
	OECD 407 Sub-acute NOAEL Oral	Rat	> 1,000 mg/kg	28 days	CSR

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

- Fertility effects** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Effects on or via lactation** : No known significant effects or critical hazards.
- Other effects** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	500 mg/kg
Dermal	2,500 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Method	Species	Result	Exposure	References
Nitric acid, ammonium calcium salt					
	Acute LC50 Fresh water	Fish	447 mg/l	48 h	IUCLID 5
	OECD 202 Acute EC50 Fresh water	Daphnia	> 100 mg/l	48 h	CSR
	OECD 201 Acute LC50 Fresh water	Algae	> 100 mg/l	72 h	IUCLID 5
	OECD 209 Acute EC50 Activated sludge	Activated sludge	> 1,000 mg/l	3 h	CSR

- Conclusion/Summary** : No known significant effects or critical hazards.

Persistence/degradability

Conclusion/Summary : Readily biodegradable in plants and soils.

Bioaccumulative potential

Conclusion/Summary : No known significant effects or critical hazards.

Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Mobility : This product may move with surface or groundwater flows because its water solubility is: high

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations**Product**

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty the bag by shaking to remove as much as possible of its contents. Empty bags may be disposed of as non-hazardous material or returned for recycling.

Section 14. Transport information

Regulation: UN Class	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.

14.4 Packing group	Not applicable.
14.5 Environmental hazards	No.
Additional information	
<u>Environmental hazards</u>	: No.

Regulation: IMDG	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	No.
Additional information	
<u>Marine pollutant</u>	: No.

Regulation: IATA	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	No.
Additional information	
<u>Marine pollutant</u>	: No.

14.6 Special precautions for user : Transport within user's premises: Ensure that persons transporting the product know what to do in the event of an accident or spillage.

IMSBC

Bulk cargo shipping name : CALCIUM NITRATE FERTILIZER
Class : Not applicable.
Group : C
Marpol V : Non-HME

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

Section 15. Regulatory information

HSNO Approval Number : HSR002571.HSR002573
HSNO Group Standard : Fertilisers (Subsidiary Hazard)Fire Fighting Chemicals

- HSNO Classification** : 6.1 - ACUTE TOXICITY: oral - Category D6.1 - ACUTE TOXICITY: dermal - Category E8.3 - CORROSIVE TO OCULAR TISSUE - Category A
- Country information** : **SCHEDULE 1 (CONDITIONS OF GROUP STANDARD) of the Fertilisers (Subsidiary Hazard) Group Standard 2006.** Any location at which a substance is manufactured or stored in quantities that exceed those set out in the Standards' Tables 3, 4, 5, 6 and 7 must comply with the corresponding conditions as set out in the Standards' clauses 6, 7 and 8.

Inventory list

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Korea inventory: All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.

United States inventory (TSCA 8b): All components are listed or exempted.

EC INVENTORY (EINECS/ELINCS): All components are listed or exempted.

Turkey: All components are listed or exempted.

Section 16. Other information

- Key to abbreviations** :
- ADNR/ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 - ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 - ATE = Acute Toxicity Estimate
 - BCF = Bioconcentration Factor
 - bw = Body weight
 - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 - IATA = International Air Transport Association
 - IBC = Intermediate Bulk Container
 - IMDG = International Maritime Dangerous Goods
 - LogPow = logarithm of the octanol/water partition coefficient
 - MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 - NOHSC - National Occupational Health and Safety Commission
 - RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 - SUSMP - Standard Uniform Schedule of Medicine and Poisons
 - UN = United Nations
- Key data sources** :
- EU REACH IUCLID5 CSR.
 - National Institute for Occupational Safety and Health, U.S. Dept. of Health, Education, and Welfare, Reports and Memoranda Registry of Toxic Effects of Chemical Substances.
 - Sphera Solutions Inc., 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada.
 - HSNO Chemical Classification and Information database

(CCID), New Zealand Inventory of Chemicals (NZIoC),

History

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Notice to reader

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