PRINT DATE REVISION DATE VERSION : : 24.04.12 : 1.0 / EN (New Zealand)





SAFETY DATA SHEET according to ST/SG/AC.10/30/REV.10

CALCINATOR TM

1.1 Product identifier:	
Substance	
Substance name	: CALCINATOR [™]
Other means of identification	: Not applicable.
Hazard components for labelling	: Calcium Chloride
1.2 Relevant Identified uses	
Relevant identified uses:	: Fertilizer
Uses advised against	: Not for consumption.
1.3 Details of the supplier of the safety da	ata sheet
Supplier	
Name	: Agri Technovation (Pty) Ltd
Address	: Agri Business Park, 5 Louw Street,
	Wellington Industrial Area
	South Africa
	7654
Telephone	: (+27) 21 300 0543
	(+64) 27 620 0567
E-Mail	: info@agritechnovation.co.za
1.4 EMERGENCY TELEPHONE NUMBER	
National Poisons and Hazardous C	Chemicals Information Centre
Dunedin Phone: 0800 POISON (080	00 764-766)
24 hr Emergency Response: 0800 (CHEMCALL (0800 243 622).

2.1 Classification of the substance			
	Classification according to ST/SG/AC.10/30/REV.10	Classification procedure	
	Eye irritation, Category 2	Based on concentration threshold	

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2.2 Label elements

Labelling according to ST/SG/AC.10/30/REV.10 Hazard pictograms



Signal word:

Warning

Hazard statements:

Causes skin irritation.

Precautionary statements:

Wash hands thoroughly after handling. Wear protective gloves. IF ON SKIN: Wash with plenty water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Supplemental Hazard information:

No supplementary hazard information.

Special rules for supplemental label elements for certain mixtures:

None known.

Additional labelling:

Keep out of reach of children.

2.3 Other hazard

None known.

SECTION 3: Composition/ Information on ingredients

3.1 Substances

Not applicable.

3.2 Mixture

Description of the mixture:

Liquid blend of calcium compounds.

Hazardous ingredients

Substance	CAS number	Concentration	Classification according to SANS
name			10234:2008
Calcium Chloride	10035-04-8	<40%	Eye irritation, Category 2

This mixture does not, within the current knowledge of the supplier, contain further substances above their cut-off concentration limit fulfilling the criteria of hazard classes according to the ST/SG/AC.10/30/REV.10 regulation or present a health risk below the cut-off concentration limit. Substances that do not fall within classification criteria are not specified in this document to protect confidentiality.

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SECTION 4: First aid measured

4.1 Description of first aid measures

General information

Take precautions to ensure your own safety when helping another person. Always wear appropriate personal protective equipment (see Section 8). If medical advice is needed, have Safety Data Sheet or product label at hand and provide treatment already administered.

Following inhalation

Get medical advice if you feel unwell.

Following skin contact

Immediately take off all contaminated clothing, shoes, and leather goods. Rinse skin with plenty of lukewarm, gently flowing water or shower for at least 10 to 20 minutes. Wash contaminated clothing before re-use or discard. If skin irritation occurs: Get medical advice/attention.

Following eye contact

Immediately call a POISON CENTRE, doctor or physician. Rinse the affected eye cautiously with lukewarm, gently flowing water for several minutes, while holding eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 60 minutes or until medical aid is available. Take care not to rinse contaminated water into unaffected eye or onto face.

Following ingestion

If exposed or if you feel unwell, get medical advice.

Self-protection of the first aider:

No additional information.

4.2 Most important symptoms and effects, both acute and delayed.

No information available on this product.

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

No information available on this product.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Mixture does not contain combustible substances. Select firefighting measures according to the surrounding conditions. In case of inclusion in ambient fire: contain vapours with water spray.

5.2 Special hazards arising from the substance or mixture

In the case of inclusion in an ambient fire hazardous substances can be released. Fire may produce hydrogen chloride.

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus and special tightly sealed suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Protective equipment

Wear respiratory protection, eye protection, hand protection and body protection. See section 8.2 of this SDS.

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Emergency procedures

Evacuate all individuals. Warn surrounding areas. Isolate the area. Put protective measures in place. Only individuals with suitable personal protective equipment should be allowed into the affected area. Remove the source if safe to do so and provide adequate ventilation in closed spaces. Wash spill area.

6.2 Environmental precautions

Low hazard to waters. Avoid penetration into water, drainage, sewer, or the ground. Inform the responsible authorities about penetration of even small quantities.

6.3 Methods and material for containment and cleaning up

For containment

Use suitable closed, labelled containers for disposal in accordance with national and local regulations. The floor must not have a floor drain.

For cleaning up

Use suitable protective equipment while cleaning if necessary. See section 8.2 of this SDS. Wipe clean with cloth or paper towel. Tested industrial vacuum cleaner or suction device can be used as alternative. Use of blower for cleaning is not recommended.

6.4 Reference to other sections

See section 8.2 for information on personal protective.

See section 13 for disposal methods.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Heed advice on general occupational hygiene. Fill only into clearly marked containers. Label containers and pipelines clearly. Do not leave container open. Avoid rising dust. If release cannot be prevented, then it should be suctioned off at the point of exit. Provide good ventilation in work areas. Eye bath required. Washing facility at the workplace is required. The locations must be sign posted. These locations must be sign posted clearly.

Fire preventions

Keep away from open flames or sources of ignition. No welding in the working area. Only work with vessels and lines after these have been thoroughly rinsed. Work done with fire or open flame should only be carried out with written permission if the risk of the fire or explosion cannot be eliminated. Keep away from combustible materials. Filter the solutions only with glass wool, glass chips, or ceramic filters. Do not use any filtration materials made of paper which risks ignition after drying. Do not leave any cleaning rags lying in the open. Empty bags containing remnants tend to self-ignite.

Environmental precautions

Dispose in accordance with national and local regulations.

Advice on general occupational hygiene

Take care to keep workplace clean and dry. Wear personal protective equipment. Avoid skin contact with product. Do not leave container open.

Wash skin with soap and water before breaks and at the end of work shifts and apply fatty skin-care products after washing. Foods, beverages, and other articles of consumption must not be consumed at the work areas.

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Suitable areas are to be designated for these purposes. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Transport in sealed containers above 4°C. Store in dry, ventilated place in tightly sealed container above 4°C.

Requirements for storage rooms and vessels

Do not use any food containers to prevent a mistake. Containers must be labelled clearly and permanently. Store in the original container as much as possible. Container should be locked up, away from children. <u>Packaging materials</u>

Glass, PE, PP and PVC.

Materials to avoid

- Pharmaceuticals, foods, and animal feeds including additives.
- Infectious, radioactive und explosive substances.
- Strongly oxidizing substances.
- Most metals

7.3 Specific end uses

See section 1.2. No additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The mixture does not, within the current knowledge of the supplier, contain substances above their cut-off concentration limit fulfilling the criteria of hazard classes according to the ST/SG/AC.10/30/REV.10 regulation or present a health risk below the cut-off concentration limit other than the raw materials listed. Substances that do not fall within classification criteria are not specified in this document to protect confidentiality.

8.2 Exposure controls

Appropriate engineering controls

All ventilation should be designed in accordance with OSHA standard. Use local exhaust at filling zones and where leakage and dust formation are probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below limits.

Components with occupational exposure limits

None

Personal protective equipment

Eye / Face protection

Wear glasses with side protection.

Skin protection

Hand protection

The use of resistant protective gloves is recommended. Skin protection cremes do not protect as effectively against the substance as protective gloves. In case of doubt contact the gloves' manufacturer.

Wear duration with occasional contact (splash): 8 hours

Be aware that liquids may penetrate gloves. Frequent change is advisable.

Body protection

Wear an overall or a lab coat

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Respiratory protection

In an emergency (e.g.: unintentional release of the substance) respiratory protection must be worn. Use suitable respiratory equipment such as MSHA/NIOSH TC-21C or NIOSH approved respirator with N, R, P or HE filter. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with ST/SG/AC.10/30/REV.10, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

SECTION 9: Physical and chemical properties	
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9.1 Information on basic physical and chemical properties

Appeara	nce
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Physical state	:	Liquid	Colour	:	Light orange to brown/pink
Odour	:	No specific odour	Odour threshold	:	No data available.

	Value	Method	Temperature	Pressure	Remark
рН	2.2 – 2.6	Measured	20 °C	1 atm	100%
					solution
Melting point/freezing	Not available.	L			
point					
Initial boiling point/boiling	Not available.				
range					
Flash point	Not available.				
Evaporation rate	Not available.				
Flammability (solid, gas)	Not relevant.				
Upper/lower flammability	Not relevant.				
or explosive limits					
Vapor pressure	Not available.				
Vapor density	Not available.				
Relative density	1.36 - 1.40	Measured	20°C	1 atm	100%
					solution
Solubility(ies)	100 % soluble in v	vater			
Partition coefficient:	Not available.				
n-octanol/water					
Auto-ignition temperature	Not relevant.				
Decomposition	Not available.				
temperature					
Viscosity	Not available.				
Explosive properties	Not relevant.				
Oxidizing properties	Not available.				

9.2 Other information:

Acute effects:

No information on this product.

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Chronic effects:

No information on this product.

Substances are not listed in the National Toxicology Program or International Agency for Research on cancer.

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid:

None known.

10.5 Incompatible materials:

No information available on this product.

10.6 Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Main routes of exposure:

No data available for occupational handling.

Acute toxicity: Data for hazardous substances

The mixture does not, within the current knowledge of the supplier, contain substances above their cut-off concentration limit fulfilling the criteria of hazard classes according to the ST/SG/AC.10/30/REV.10 regulation or present a health risk below the cut-off concentration limit.

Other information

No other information.

Assessment Classification

Based on available data, the classification criteria according to ST/SG/AC.10/30/REV.10 are not met.

Hazard classification

Classification	Hazard Description
Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on the concentration threshold of combined raw materials, as
	listed, the mixture is classified as Eye irritation, Category 2.
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.

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STOT – single exposure	Based on available data, the classification criteria are not met.
STOT – repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

Other information:

None known.

SECTION 12: Ecological information

12.1 Toxicity:

Aquatic toxicity

No information available on this product. Assessment / Classification Classification is not mandatory.

12.2 Persistence and degradability

Not classifiable due to data lacking.

12.3 Bio accumulative potential

Not classifiable due to data lacking.

12.4 Mobility in soil

Not classifiable due to data lacking.

12.5 Results of PBT and vPvB assessment

Not classifiable due to data lacking.

12.6 Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

If there is no way of recycling it must be disposed of in compliance with the respective national and local regulations.

Collection of small amounts of product:

Do not put waste into sink or dust bin. Collect in container for toxic, inorganic residues and heavy metals salts and their solution. Adjust product to a pH of 6 - 8. Collection vessels must be clearly labelled with a systematic description of their contents. Store the vessels in a well-ventilated location. Entrust them to the appropriate authorities for disposal.

SECTION 14: Transport information

UN Number: Not applicable

UN Proper shipping name: Not applicable

Transport hazard class: Not regulated as a dangerous good.

Transport in bulk according to IMO instrument: Not available.

DOT: Not regulated as a hazardous material by DOT.

IATA: Not regulated as a dangerous good.

IMDG: Not regulated as a dangerous good.

Special precautions for user

None known.

Special precautions for user

None known.

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SECTION 15: Regulatory information

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

GHS: ST/SG/AC.10/30/REV.10

15.2 Chemical Safety Assessment

No chemical safety assessment was completed for this product.

SECTION 16: Other information

16.1 Indication of changes

First version.

16.2 Abbreviations and acronyms

ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (division of the American Chemical Society)
DOT	Department of transportation
EC50	Half maximal effective concentration
GHS	Globally Harmonised System
IATA	International Airport Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration required to kill 50% of the population

16.3 Key literature references and sources for data

C&L Inventory - ECHA [WWW Document], n.d. URL https://echa.europa.eu/information-on-chemicals/cl-inventory-database (accessed 6.6.19).

GESTIS Substance database [WWW Document], n.d. URL http://gestisen.itrust.de/nxt/gateway.dll/gestis_en/000000.xml?f=templates\$fn=default.htm\$vid=gestiseng:sdbeng\$3.0 (accessed 6.6.19).

HAZARD COMMUNICATION: Hazard Classification Guidance for Manufacturers, Importers, and Employers, n.d.

16.4 Classification for mixtures and used evaluation method according to ST/SG/AC.10/30/REV.10

Classification based on calculation or concentration thresholds. See SECTION 2.1 (classification).

16.5 Relevant R-, H- and EUH-phrases (number and full text)

None

16.6 Training advice

Not relevant.

16.7 Further information

This SDS summarizes to the best of our knowledge at the date of issue, the chemical health and safety hazards of the product and general guidance on how to safely handle the material in the workplace.