

Revision: 2.0
(Replaces revision 1.1 of 16 April 2021)Revision date:
Date printed:18 June 2021
12 August 2023**Section 1. Identification****1.1 Product Identifier** 0627

Product Name CERIC AMMONIUM NITRATE REAGENT (0.05M)

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd

Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811
(24hr) 112
(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

| | |
|---|--|
| Corrosive to metals, category 1 | H290: May be corrosive to metals. |
| Skin corrosion/irritation, category 2 | H315: Causes skin irritation. |
| Serious eye damage/irritation, category 2 | H319: Causes serious eye irritation. |
| Skin sensitization, category 1 | H317: May cause an allergic skin reaction. |
| Hazard to aquatic environment, category 2 | H411: Toxic to aquatic life with long lasting effects. |

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word Warning

Hazard Pictograms



Hazard Statements Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May be corrosive to metals. Toxic to aquatic life with long lasting effects.

Precautionary Statements Wear protective gloves / protective clothing / eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention.

Section 3. Composition

3.2 Mixtures

| Component | CAS No. | EEC No. | REACH No. | Conc w/w | CLP Classification (1272/2008/CE) |
|------------------------|------------|-----------|-----------------------|----------|---|
| Sulphuric acid | 7664-93-9 | 231-639-5 | 01-2119458838-20-XXXX | 5% | Skin Corr. 1A |
| Ceric ammonium nitrate | 16774-21-3 | 240-827-6 | | ~2.8% | Ox. Sol. 2, Met. Corr. 1, Skin Corr. 1A, Acute Tox. 4 (O), Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1 |

Section 4. First Aid

4.1 Description of first aid measures

| | |
|--------------------------------------|---|
| Eyes | Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION. |
| Skin | Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. |
| Inhalation | Remove from exposure. |
| Ingestion | Wash out the patients mouth thoroughly with water. |
| Personal protection for first aiders | Wear protective gloves / eye protection. |

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

| | |
|---------------------|--|
| Extinguishing Media | Consider what other flammable materials are present and act accordingly. |
| Unsuitable Media | Nothing specified. |

5.2 Special hazards arising from the substance or mixture

| | |
|---------|-----------------------------------|
| Hazards | Presents no specific fire danger. |
|---------|-----------------------------------|

5.3 Advice for firefighters

| | |
|-------------------------|---|
| Advice for firefighters | Consider all other materials in the vicinity. |
|-------------------------|---|

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

| | |
|---------------------|--|
| Personal Protection | Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. |
|---------------------|--|

6.2 Environmental precautions

Environmental Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

| Component | CAS No | Concentration | Workplace Exposure Limits | | | |
|------------------------|------------|---------------|---------------------------|-------------------------|---|---|
| | | | Long Term (8hr TWA) | Short Term 15min period | | |
| Sulphuric acid | 7664-93-9 | 5% | - | 0.05 mg/m-3 | - | - |
| Ceric ammonium nitrate | 16774-21-3 | ~2.8% | - | - | - | - |

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.

Hand Protection Wear gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Clear orange solution.

Odour Odourless.

pH Not applicable

Boiling Point Not available

Melting Point Not applicable

Flash Point Not applicable

Upper Flammable Limit Not applicable

Lower Flammable Limit Not applicable

Auto Ignition Not applicable

| | |
|----------------------|----------------|
| Explosive Properties | No. |
| Oxidising Properties | No. |
| Vapour Pressure | Not applicable |
| Relative Density | Not available |
| Water Solubility | Not available |

9.2 Other information

No data available.

Section 10. Stability & Reactivity

| | |
|---|--------------------------------|
| 10.1 Reactivity | No data available. |
| 10.2 Chemical Stability | Stable under normal conditions |
| 10.3 Possibility of hazardous reactions | No data available. |
| 10.4 Conditions to Avoid | No specific conditions. |
| 10.5 Incompatible Materials | Alkalis. |
| 10.6 Hazardous Decomposition Products | None unusual. |

Section 11. Toxicological Information

11.1 Information on toxicological effects

| | |
|----------------------|--|
| Eyes | The liquid may be irritating to the eyes. |
| Skin | Presents no significant hazard by skin contact. |
| LD50 Skin | Not available |
| Ingestion | Presents no significant hazard by ingestion. |
| LD50 Oral | Not available |
| Inhalation | Presents no significant health hazard by inhalation. |
| LD50 Inhalation | Not available |
| TCLo | Not available |
| Carcinogenicity | Not considered to be a carcinogen. |
| Mutagenicity | Not considered to be a mutagen. |
| Reproductive Effects | None identified. |

Section 12. Ecological

| | |
|---------------------------------------|-----------------------------------|
| 12.1 Toxicity | No specific environmental hazard. |
| LC50 Algal | Not available |
| LC50 Crustacea | Not available |
| LC50 Fish | Not available |
| 12.2 Persistence and degradability | No data available. |
| 12.3 Bioaccumulative potential | No data available. |
| 12.4 Mobility in soil | No data available. |
| 12.5 Results of PBT & vPvB assessment | Assessment not required. |
| 12.6 Other adverse effects | None known at present. |

Section 13. Disposal Considerations

13.1 Waste treatment methods

| | |
|------------------------|---|
| Disposal Methods | Dilute in a large excess of water and carefully neutralise with soda ash, then wash to drain with copious amounts of water. |
| Contaminated Packaging | Wash out containers with water. Use a licensed waste disposer. |

Section 14. Transport Information

| | |
|-----------------------------------|----------------------------------|
| 14.1 UN Number | Non-restricted |
| 14.2 Proper Shipping Name | Non-restricted |
| 14.3 Transport classes | |
| UN classification | None |
| Subsidiary hazard(s) | None |
| Transport category | None |
| ADR Hazard ID | Non-restricted |
| Tunnel Restriction Code | Non-restricted |
| 14.4 Packing Group | None |
| 14.5 Environment hazards | See section 12. |
| 14.6 Special precautions for user | No special precautions required. |
| 14.7 Transport in bulk | Not transported in bulk. |

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Corrosive to metals, category 1; Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2; Skin sensitization, category 1; Hazard to aquatic environment, category 2

Signal word Warning

Hazard Pictograms



Hazard Statements H315, H319, H317, H290, H411

Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May be corrosive to metals. Toxic to aquatic life with long lasting effects.

Precautionary Statements P280, P302+P352, P332+P313, P305+P351+P338, P337+P313

Wear protective gloves / protective clothing / eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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