

**Corporate Office : “Gitanjali”, Tulip Block, Dr. Antonio Do Rego Bagh, Alto Santacruz,
Bambolim Complex Post Office, Goa – 403 202. INDIA.
Tel.: (0832) 2458546 – 51, Fax: (0832) 2458544**

Material Safety Data Sheet

1. Product Identification

Product Name : **Calcium Kit (Arsenazo III Method)**
Catalog Number : CAL 020 / CAL 021 / CAL 022 / CAL 023

2. Composition / Information on Hazardous Ingredients

| Chemical Name | CAS # | % W/V | Exposure Limits in Air | | | | |
|---------------|-------|-------|------------------------|------|------|------|-------|
| | | | ACGIH | | OSHA | | OTHER |
| | | | TLV | STEL | PEL | STEL | |

Reagent 1: Calcium Reagent

| Chemical Name | CAS # | % W/V | ACGIH TLV | ACGIH STEL | OSHA PEL | OSHA STEL | OTHER |
|---------------|------------|-------|-----------|------------------------|----------|-----------|--------------------------------------|
| Sodium Azide | 26628-22-8 | 0.1 | N / A | 0.29 mg/m ³ | N / A | N / A | NIOSH 0.3 mg/m ³ C (skin) |
| | | | | | | | |

Reagent 2: Calcium Standard

| Chemical Name | CAS # | % W/V | ACGIH TLV | ACGIH STEL | OSHA PEL | OSHA STEL | OTHER |
|---------------|------------|-------|-----------|------------------------|----------|-----------|--------------------------------------|
| Sodium Azide | 26628-22-8 | 0.1 | N / A | 0.29 mg/m ³ | N / A | N / A | NIOSH 0.3 mg/m ³ C (skin) |
| | | | | | | | |

Reagent 3: N/A

| Chemical Name | CAS # | % W/V | ACGIH TLV | ACGIH STEL | OSHA PEL | OSHA STEL | OTHER |
|---------------|-------|-------|-----------|------------|----------|-----------|-------|
| | | | | | | | |
| | | | | | | | |

Reagent 4: N/A

| Chemical Name | CAS # | % W/V | ACGIH TLV | ACGIH STEL | OSHA PEL | OSHA STEL | OTHER |
|---------------|-------|-------|-----------|------------|----------|-----------|-------|
| | | | | | | | |
| | | | | | | | |

Reagent 5: N/A

| Chemical Name | CAS # | % W/V | ACGIH TLV | ACGIH STEL | OSHA PEL | OSHA STEL | OTHER |
|---------------|-------|-------|-----------|------------|----------|-----------|-------|
| | | | | | | | |
| | | | | | | | |

3. Hazard Identification

Primary Routes of Entry:

Inhalations, ingestion, skin and / or eye contact.

Inhalation:

Inhalation of Vapours, mists, or sprays of these components may irritate the nose, throat, and lungs. Symptoms are generally alleviated upon breathing fresh air.

Ingestion:

Though not a likely route of occupational exposure, ingestion of this product, especially in large quantities, May cause gastric distress. Symptoms may include nausea, vomiting, or diarrhea.

Skin Contact:

If the liquid or Vapours of this product come in contact with the skin, mild irritation may develop. Sodium Azide may enter body through skin.

Eye Contact:

If the liquid or Vapours of this product come in contact with the eyes, mild irritation may develop.

Chronic Exposure:

N/A

Medical Conditions Aggravated by Exposure:

N/A

Health Effects:

Sodium azide is used as a preservative in this product. Adverse health effects are not expected from the recommended use of this product.

4. First Aid Measures**Inhalation:**

If breathing becomes difficult, remove victim to fresh air. Seek medical attention immediately.

Ingestion:

Get medical attention if there has been ingestion of this product.

Skin Contact:

Avoid skin contact. If skin contact occurs, remove contaminated clothing and wash exposed skin with water for atleast 15 minutes. Get medical attention immediately.

Eye Contact:

Immediately flush eye(s) with large volume of water for atleast 15 minutes, occasionally lifting the lower lids. Get medical attention immediately.

5. Fire Fighting Measures

Flash Point (Method used): N/A **Flammable Limits – LEL:** N/A **UEL:** N/A

Extinguishing Media:

Use fire extinguishing media appropriate for site conditions.

Special Fire Procedures:

Structural firefighting gear and self-contained breathing apparatus will provide adequate protection if this product is in a fire area.

Unusual Fire and Explosion Hazards:

Sodium azide can react with copper, lead, brass, or solder in plumbing to form explosive compounds of lead azide and copper azide. Sodium azide can react with acids to form explosive hydrogen azide.

6. Accidental Release Measures**Steps to be taken in case material is Released or Spilled:**

PPE should be level D: lab gloves, chemical resistant apron, boots and splash goggles. Use an absorbent material to contain / pick up the spilled solution. Place all spill residues into a suitable container, seal, label and hold for disposal.

7. Handling and Storage

Refer to packet insert for additional information on handling and storage procedures.

8. Exposure Controls and Personal Protection**Ventilation Data:**

A system of local and / or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

Respiratory Protection:

Respiratory protection is not required under normal use of this product. If respiratory protection is needed, follow OSHA respirator regulations (29CFR1910.134) and, if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide worker protection for given working conditions, level of airborne concentration, and presence of sufficient oxygen.

Protective Gloves:

Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly.

Other Protective Equipment:

Wear appropriate eye protection to prevent eye contact. Wear appropriate body protection to prevent skin contact.

Other Engineering Controls:

Eye wash stations and deluge showers.

Work Practices:

Good laboratory technique should be used when handling this product. Observe appropriate chemical hygiene. Avoid contact with eyes or skin. Do not place in mouth.

Hygienic Practices:

Do not eat, drink, or smoke while working with product. Upon completion of work activities involving this product, wash hands thoroughly with soap and water.

9. Physical And Chemical Properties

For All Components Unless Otherwise Indicated

| | | | |
|------------------------------------|---------|-------------------------------|-----|
| Relative Vapour density(air = 1) : | N/A | Evaporation rate(nBuAc = 1): | N/A |
| Specific Gravity (water = 1) : | N/A | Freezing / Melting Point : | N/A |
| Solubility in Water : | Soluble | Boiling Point : | N/A |
| Vapour Pressure, mm Hg @ 20oC: | N/A | pH : | 6.5 |

Odour and Appearance Information

Reagent 1: Pink color liquid

Reagent 2: Clear, colorless liquid

Reagent 3: N/A

Reagent 4: N/A.

Reagent 5: N/A.

10. Stability and Reactivity

Incompatibility (Materials to Avoid):

Strong bases, strong acids, and water reactive materials.

Hazardous Decomposition Products:

Thermal decomposition may produce carbon monoxide and carbon dioxide.

Will Hazardous Polymerization Occur?

Hazardous polymerization will not occur.

Conditions to Avoid / Polymerization:**Is the Product Stable?**

Yes, under normal handling and storage conditions.

Conditions to Avoid/stability

Stable Solution. Avoid acidification of solution, which may generate hydrogen cyanide gas.

11. Toxicological Information

Toxicity Data:

Sodium Azide (Undiluted): LD50 (rat and mouse, oral)=27mg/kg; LD50 (rabbit, skin)=20mg/kg.

Reproductive effects:

N/A.

Target organ Effects:

Eyes(redness), Skin(redness), central nervous systems(nausea/vomiting), cardiovascular systems (fall in blood pressure, change in heart rate), digestive(nausea/vomiting, diarrhea).

Carcinogenicity: No

| CHEMICAL NAME | CAS # | % W/V | NTP Carcinogen | | IARC | OSHA |
|---------------|-------|-------|----------------|-------------|------|------|
| | | | Known | Anticipated | | |
| N/A. | | | | | | |

12. Ecological Information

Environmental Fate / Stability:

N/A

Effect of Material on plants or animals:

N/A

Effect of Chemical on Aquatic Life:

N/A

13. Disposal Considerations

EPA Waste Number and Proper Waste Disposal Method:

Please consult local, state and federal regulations for additional guidance on disposal.

14. Transportation Information

Is this Material Hazardous? Not regulated under transportation regulations.

| | | |
|----------------------------|--------------------|----------------|
| Proper Shipping Name : N/A | Packing Group: N/A | UN Number: N/A |
| Hazard Class Number : N/A | | |

15. Regulatory Information

NA.

16. Other Information

NA => NOT APPLICABLE or NO INFORMATION