SECTION 1: Identification of the substance/mixture and of the company

1.1 Product identifier

- Product Name: **CALCIUM O-CPC**

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

- BioScien Diagnostic reagent for the in-vitro quantitative determination of Calcium in human serum, plasma and urine on manual systems.

1.3 Details of the supplier of the safety data sheet

- Name of Manufacturer: Arena BioScien, SEA
- Address of Manufacturer: Block 5, Street 9 Ismailia free zone. Ismailia- Egypt
- Telephone: +202 21813500/ +201113102057
- Email: admin@arenabioscientific.com

SECTION 2 Hazards identification

-Primary Routes of Entry: Inhalation, ingestion, skin and / or eye contact.

- Inhalation:

Sodium azide:Inhalation of vapors may cause headache, nausea, dizziness, fatigue, cyanosis, weakness in arms and legs. Hydrochloric acid: Inhalation of vapors may cause pulmonary edema, circulatory systems collapse, damage to upper respiratory system, coughing, and difficult breathing.

- Ingestion:

Sodium Azide: Ingestion may cause nausea, vomiting, headache, dizziness, gastrointestinal irritation, blurred vision, lowering of blood pressure. Hydrochloric Acid: Ingestion is harmful and may be fatal. Ingestion may cause severe burning to mouth and stomach, nausea and vomiting.

- Skin Contact:

Sodium Azide: Contact with the skin, may develop mild irritation. Sodium Azide may enter body through skin. Hydrochloric Acid: Contact with the skin may cause severe burns.

- Eye Contact:

Sodium Azide: Contact with the eyes, may develop mild irritation. Hydrochloric Acid: Liquid may cause severe burns to eyes. Can penetrate deeply causing irritation or severe burns depending on the concentration and duration of exposure.

- Chronic Exposure:

Hydrochloric Acid: long term exposure to vapors may cause pulmonary edema and damage to upper respiratory systems.

- Medical Conditions Aggravated by Exposure:

Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

- Health Effects:

The vapours or liquid can rapidly injure exposed tissue, cause skin and eye damage, and irritate mucous membranes and the respiratory tract. Health hazards given on this data sheet apply to concentrated solutions of Hydrochloric acid. Hazards of dilute solutions may be reduced, depending upon the concentration.

SECTION 3 Composition/information on ingredients

3.1 Substances

Chemical Name	CAS #	% W/V	Exposure Limits in Air				
			ACGIH		OSHA		OTHER
			TLV	STEL	PEL	STEL	
BUFFER Reagent	N / A		N / A	N / A	N / A	N / A	
Color Reagent	7647-01-0	0.28%	N / A	5 ppmC	N / A	5 ppmC	NIOSH REL 5ppm C
Sodium Azide	26628-22-8	0.28%	N / A	0.29 mg/m3	N / A	N / A	NIOSH 0.3 mg/m3 C (skin)

SECTION 4 First aid measures

4.1 Description of first aid measures

- General

In case of doubt, or when symptoms persist, seek medical attention.
In general, this product is not hazardous to humans or animals, but like any other chemical, it should be treated with care, respect, and common sense.

- Contact with skin

Remove contaminated clothing.
Wash affected area with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention. Contaminated clothing should be laundered before reuse.

- Contact with eyes

If substance has gotten into eyes, immediately wash out with plenty of water for at least 15 minutes. Irrigate eyes thoroughly while lifting eyelids. Seek medical advice if necessary.

- Ingestion

Rinse mouth with water (do not swallow).
Never make an unconscious person vomit or drink fluids.
If medical advice is needed, have product container or label at hand.

- Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

SECTION 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 compound of lead azide and copper azide. Sodium azide can react with acids to form explosive hydrogen azide.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Shut off all ignition sources.
- Use non-sparking hand tools.
- Avoid raising dust.
- Remove contaminated clothing.
- Wear protective clothing as per Section 8.
- Wash thoroughly after dealing with spillage.

6.2 Environmental Precautions

- Do not allow to enter public sewers and watercourses.
- Avoid scattering in the environment.

6.3 Methods and material for containment and cleaning up

- Absorb spillage in inert material and shovel up.
- Place in sealable container.
- Seal containers and label them.
- Ventilate the area and wash spill site after material pick-up is complete.
- Dispose of contaminated materials and wastes in accordance with local/national/international regulations.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Do not breathe dust.
- Avoid contact with skin and eyes.
- Do not eat, drink, or smoke when using this product.
- Ensure adequate ventilation.
- Eyewash bottles should be available.
- Wash hands thoroughly after using this substance.

7.2 Conditions for safe storage, including any incompatibilities

- Storage temperature: see component label
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a dry place.
- Keep away from: heat sources, acids.

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

- There are no recommended or established controls for this product.

8.2 Exposure controls

- Eyewash bottles should be available.
- Engineering controls should be provided to prevent the need for ventilation.
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask, NIOSH N95 (US) or type FFP1 (EN143) dust masks.
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard for ANSI Z87 or EN 166.
- Wear suitable protective clothing in accordance with good chemical hygiene practices.



Gloves | Safety Glasses | Lab Coat

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: R1: Clear, colorless liquid
  R2: Clear, colorless liquid
  R3: Pale yellow liquid
- Odor: No information available
- pH: acidic
- Melting point/Range: N/A
- Boiling Point/Range: N/A
- Flashpoint : No information available
- Evaporation Rate(nBuAc = 1): N/A
- Flammability: No information available
- Vapor Pressure, mm Hg @ 20oC: N/A
- Specific Gravity (water = 1): N/A
- Solubility in water: Soluble
- Oxidizing Properties: No information available

SECTION 10 Stability and reactivity

10.1 Reactivity
- No information available

10.2 Chemical stability
- Considered stable under normal conditions.

10.3 Possibility of hazardous reactions
- No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid
- Sodium Azide: Avoid acidification of solution, which may generate hydrogen cyanide gas.
- Hydrochloric Acid: Heat and moisture.

10.5 Incompatible materials
- Strong bases, strong acids, and water reactive materials.

10.6 Hazardous Decomposition Products
- Thermal decomposition may produce carbon monoxide and carbon dioxide.

SECTION 11 Toxicological information

11.1 Information on toxicological effects

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

_Hydrochloric acid: eye irritancy (rabbit)-1% solution/20sec., comeal scarring; Eye irritancy (rabbit)= 5mg/30sec, mild; eye irritancy (rabbit)=100mg/rinse, mild; skin irritancy(rabbit)=0.5ml/17% solution/4hours, corrosive burns.

- Target organ Effects:

_Sodium Azide: Eyes, Skin, central nervous systems, cardiovascular systems.

_Hydrochloric Acid: Eyes, Skin and Respiratory system. Sodium Hydroxide: Eyes, Skin and Respiratory system.

- Carcinogenicity:

Not listed in the National Toxicology Program (NTP) 13th Report on Carcinogens.

Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-112.

Not listed in OSHA standard 1910.1003 Carcinogens.

- Mutagenicity: No evidence of mutagenic effects.
- Teratogenicity: No information available

SECTION 12 Ecological information

12.1 Toxicity
- This product is not classified as hazardous to the environment under U.S. regulations.

12.2 Persistence and degradability
- No information available

12.3 Bioaccumulation Potential
- No information available

12.4 Mobility in soil
- No information available

12.5 Results of PBT and vPvB assessment
- Not a PBT according to REACH Annex XIII
- PBT/vPvB assessment not available

12.6 Other Adverse Effects
- To the best of our knowledge, the properties of this material have not been fully evaluated.
- On available data, substance is not harmful to the environment.

SECTION 13 Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, regional, national, and/or international regulations.
- Do not discharge into drains or the environment, dispose to an authorized waste collection point.
- Do not reuse empty containers.

13.2 Classification (REACH)

- Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined.

Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

SECTION 14 Transport information

Not regulated under transportation regulations

14.1 UN Number: N/A

14.2 UN Proper Shipping Name: N/A

14.3 Transport hazard class(es) : N/A

14.4 Packing group: N/A

SECTION 15 Regulatory information

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

- This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006- 453/2010, WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR), and with the OSHA Hazard Communication Standard 29 CFR 1910.1200.
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe.

SECTION 16 Other information

Date of Preparation: September 2019

Revision: Rev. 0

Replaces: New issue

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Arena BioScien Manufacturers, SEA. shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.