

**SAFETY DATA SHEET**Doc. ID: OSR61117 Rev. 06
Revised (year/month/day) 2015/03/20**Section 1 Identification of the Substance/mixture and of the Company/undertaking****1.1 Product Identifier**

Product Name Calcium Arsenazo
Part Number OSR60117, OSR61117, OSR65117, OSR66117

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

Product Use For In Vitro Diagnostic Use. See product literature for details.

1.3 Details of the supplier of the safety data sheet**Manufacturer**

Beckman Coulter, Inc.
250 S. Kraemer Blvd
Brea, CA 92821, U.S.A.
Tel: 800-854-3633

EC REP Address

Beckman Coulter Ireland Inc.
Lismeehan
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Tel: 353 (0)65 6831100

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SDSNT@beckman.com
Further information Contact:
Customer support Unit, Beckman Coulter Ireland Inc.
Technical Service Department Tel. +001-800-854-3633 (PST)
E-mail CC_Support.ie@beckman.com

1.4 Emergency telephone number

Telephone number (24H) Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887
Tel +353 (0)65 683 1170; 08:00 - 16:30 hrs Mon-Thur, 08:00 - 15:30 hrs Fri (GMT) Tel +001-800-223-0130 (PST)

Distributor and Emergency Phone No.

Refer to attached list, Document ID: [472050](#), for local distributor and emergency phone numbers.

Section 2 Hazards Identification**2.1 Classification of substance or mixture**

Product Description In vitro diagnostic reagent.
Pink; Clear; Liquid; Characteristic odor

Classification according to EC 1272/2008 (CLP/GHS)

Skin Irritation Category 2
Eye Irritation Category 2

Classification according to EC Directives 1999/45/EC and 67/548/EEC

Xn;R20/22

Section 2 Hazards Identification (Continued)

Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS

Skin Irritation Category 2
Eye Irritation Category 2
Toxic to Reproductive Category 2

2.2 Label Elements

According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS

Hazardous Ingredients

Imidazole
2-Chloroacetamide

Pictogram



Signal Word

WARNING

Hazard Statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.
EUH208 May produce an allergic reaction.

Precautionary Statements

P201 Obtain special instructions before use.
P280 Wear protective gloves, protective clothing and eye/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before use.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/national regulations
Product label will display most significant precautionary statements.
For full text of R- phrases: see Section 16.

2.3 Other hazards

This product contains concentrations of azide below the hazardous level which with repeated contact with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds. Sodium azide forms explosive compounds with heavy metals.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

See Section 11 Toxicological Information for more detailed health information.

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Section 3 Composition and Information on Ingredients

3.2 Mixtures

Hazardous Ingredients:		Hazard Classification of Pure Ingredients			
Chemical Name	% by wt.	EU-67/548/EEC	EU 1272/2008 CLP/GHS	GHS	
Imidazole CAS # 288-32-4 EINECS # 206-019-2 Index # Not available	1 - 2	Xn;R22 C;R34	Acute Tox. Oral 4 Repr. 2 Skin Corr. 1B H302; H314; H361	Acute Tox. Oral 4 Repr. 2 Skin Corr. 1B H302; H314; H361	
2,7-(bis(2-arsenophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid CAS # 1668-00-4 EINECS # 216-788-6 Index # 033-002-00-5	0.1 - 0.2	T;R23/25 N;R50/53	Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 H301; H331; H400; H410	Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 H301; H331; H400; H410	3, 4, 8
Sodium Azide CAS # 26628-22-8 EINECS # 247-852-1 Index # 011-004-00-7	< 0.1	T+;R28-32 N;R50/53	Acute Tox. Oral 2 Aquatic Acute 1 Aquatic Longterm 1 H300; H400; H410	Acute Tox. Oral 2 Aquatic Acute 1 Aquatic Longterm 1 H300; H400; H410	2, 8
2-Chloroacetamide CAS # 79-07-2 EINECS # 201-174-2 Index # 616-036-00-0	< 0.1	T;R25-43-62 Repr. Cat. 3	Acute Tox. Oral 3 Repr. 2 Skin Sens. 1 H301; H317; H361	Acute Tox. Oral 3 Aquatic Acute 3 Repr. 2 Skin Sens. 1 H301; H317; H361; H402	15, 8

15 - May produce an allergic reaction.

2 - Substance with Community workplace exposure limits

3 - Health hazard

4 - Environmental hazard

8 - Present at concentration below the cut-off limits.

See section 8 for available Occupational exposure limits

See Section 15 for additional regulatory information

See Section 16 for hazard class, hazard statements and risk phrase description

Section 4 First Aid Measures

4.1 Description of first aid measures

Inhalation

If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.

Eye Contact

If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.

Skin Contact

In case of skin contact, flush with copious amounts of water for at least 15 minutes. If pain or irritation occur, obtain medical attention.

Ingestion

If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.

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Section 4 First Aid Measures (Continued)

4.2 Most important symptoms and effects, both acute and delayed

May produce an allergic reaction in some people.
Suspected of damaging fertility or the unborn child.
See Section 11 Toxicological Information for more detailed health information.

4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

Section 5 Fire Fighting Measures

Flammable Properties Nonflammable aqueous solution.

5.1 Extinguishing Media In case of fire use carbon dioxide (CO₂), dry chemical, water spray or foam.
For large fires use extinguishing media suitable for surrounding fire.

5.2 Special hazards arising from the substance or mixture

Special Fire and Explosion Hazards

No special hazards determined.

Hazardous Combustion Products

No combustion products posing significant hazards are expected from this product (an aqueous solution).

5.3 Advice for fire fighters

Protective Equipment

Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

5.4 Additional information

No further relevant information available.

Section 6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

Observe general safety guidelines for protection; avoid eye and skin contact.
Wear protective gloves, protective clothing and eye/face protection.

6.2 Environmental Precautions

Contain spill to prevent migration.
Do not allow the undiluted product to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up

Spill and Leak Procedures

Absorb spilled material with an appropriate inert, non-flammable absorbent and dispose according to local regulations.

6.4 Reference to other sections

Refer sections 8 and 13.

Section 7 Handling and Storage

7.1 Precautions for safe handling Use good laboratory procedures; avoid eye and skin contact.
Avoid inhaling, ingesting, and contact with eyes and skin.

Section 7 Handling and Storage (Continued)

7.2 Conditions for safe storage, including any incompatibilities

Store at 2 to 8°C , as directed on the product label.

To maintain product quality, store according to the instructions in the product labeling.

Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

7.3 Specific end uses

No further relevant information available.

Section 8 Exposure Controls and Personal Protection

8.1 Control parameters

Exposure Limits

US OSHA

None established

ACGIH

Sodium Azide
CAS # 26628-22-8

0.29 mg/m3 Ceiling (as NaN₃); 0.11 ppm Ceiling (as Hydrazoic acid) (vapor)

DFG MAK

2-Chloroacetamide
CAS # 79-07-2

skin notation

Sodium Azide
CAS # 26628-22-8

0.4 mg/m3 Peak (inhalable fraction); 0.2 mg/m3 TWA MAK (inhalable fraction)

Ireland

Sodium Azide
CAS # 26628-22-8

0.1 mg/m3 TWA (as NaN₃); 0.3 mg/m3 STEL (as NaN₃); Potential for cutaneous absorption

IOELVs

Sodium Azide
CAS # 26628-22-8

Possibility of significant uptake through the skin; 0.1 mg/m3 TWA; 0.3 mg/m3 STEL

NIOSH

None established

Japan

None established

8.2 Exposure controls

Engineering Controls

No special engineering controls are required. Use with good general ventilation.

Eye Protection

Safety glasses or chemical goggles should be worn to prevent eye contact.

Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.

Skin Protection

Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact.

Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

Respiratory Protection

Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

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Section 9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid	Specific Gravity (Water=1.0)	1.004 @20°C
Color	Pink	Solubility	
Transparency	Clear	Water	Miscible
Odor	Characteristic odor	Organic	Not determined
pH	6.9	Partition coefficient: n-octanol/water	Not determined
Freezing Point	Similar to water, approximately 0 °C	Auto-ignition Temp.	Product is not selfigniting
Boiling Point	Similar to water, approximately 100 °C	Decomposition Temperature	Not determined
Flash Point	Not applicable	Percent Volatiles	Not applicable
Evaporation Rate	Not determined	Vapor Pressure	Similar to water, approximately 23 hPa
Flammability (Solid, Gas)	Not applicable	Viscosity	Not determined
Flammability Limits	Not applicable	Explosive Properties	Not applicable
Vapor Density	Not determined	Oxidizing Properties	Not applicable
Odor Threshold	Not applicable		

9.2 Other Information No further relevant information available.

Section 10 Stability and Reactivity

10.1 Reactivity	No further relevant information available.
10.2 Chemical Stability	The product is stable in accordance with recommended storage conditions.
10.3 Possibility of hazardous reactions	Sodium azide forms explosive compounds with heavy metals. Repeated contact of low concentrations of azide with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.
10.4 Conditions to Avoid	Avoid contact with incompatible materials. Avoid exposure to heat and direct sunlight.
10.5 Incompatible materials	Metals and metallic compounds
10.6 Hazardous Decomposition Products	No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

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Section 11 Toxicological Information

11.1 Information on toxicological effects

Toxicity Data for Hazardous Ingredients

Imidazole
CAS # 288-32-4 Oral LD50 Rat 220 mg/kg

Sodium Azide
CAS # 26628-22-8 Oral LD50 Rat 27 mg/kg; Dermal LD50 Rat 50 mg/kg; Dermal LD50 Rabbit 20 mg/kg

Primary Routes of Exposure Eye contact, ingestion, inhalation, and skin contact.

Skin Corrosion/Irritation May cause skin irritation.

Serious eye damage/eye irritation May cause eye irritation.

Respiratory/skin sensitization This product contains a sensitizing substance below concentration limit, may produce an allergic reaction in some people. Refer Section 3.

Carcinogenicity No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.

Germ cell mutagenicity No data available.

Reproductive Toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity – single exposure

No data available.

Specific target organ toxicity – repeated exposure

No data available.

Aspiration hazard No data available.

Other Information No further relevant information available.

Section 12 Ecological Information

12.1 Ecotoxicity

Fresh Water Species

Sodium Azide
CAS # 26628-22-8 96 h LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 h LC50 Lepomis macrochirus: 0.7 mg/L; 96 h LC50 Pimephales promelas: 5.46 mg/L [flow-through]

Microtox

No information available.

Water Flea

Imidazole
CAS # 288-32-4 48 h EC50 Daphnia magna: 341.5 mg/L

Fresh Water Algae

Imidazole
CAS # 288-32-4 72 h EC50 Desmodesmus subspicatus: 130 mg/L; 96 h EC50 Desmodesmus subspicatus: 82 mg/L

12.2 Persistence and degradability Not determined for the product.

12.3 Bioaccumulation Not determined for the product.

Section 12 Ecological Information (Continued)

- 12.4 Mobility in soil** Not determined for the product.
- 12.5 Results of PBT and vPvB assessment**
Not determined for the product. PBT: Not applicable, vPvB: Not applicable.
- 12.6 Other Adverse Effects** This product contains environmentally hazardous substance below the cutoff level. Refer section 3 for ingredient information. Do not allow undiluted product to enter sewer/surface or ground water.

Section 13 Disposal Considerations

- 13.1 Waste treatment methods**
- Product Waste Disposal** Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.
Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).
To avoid the possible build-up of azide compounds, flush wastepipes with water after the disposal of undiluted reagent. Sodium azide disposal must be in accordance with appropriate local regulations.
- Package disposal** Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.
- 13.2 Additional information** Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

Section 14 Transport Information

Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.

Section 15 Regulatory Information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- US Federal and State Regulations**
- SARA 313** Sodium Azide is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration
- CERCLA RG's, 40 CFR 302.4** Sodium Azide is listed.
- California Proposition 65** No ingredients listed.
- Massachusetts MSL** Sodium Azide is listed.
- New Jersey Dept. of Health RTK List**
Sodium Azide is listed.
- Pennsylvania RTK** Sodium Azide is listed.

Section 15 Regulatory Information (Continued)

EU Regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

REACH 1907/2006 EC - Annex XIV - list of substances subject to authorization.

No ingredients listed.

According to EC Directives (1999/45/EC and 67/548 EEC)

Harmful
Xn



Risk and Safety Phrases

R20/22 Harmful by inhalation and if swallowed.

S36 Wear suitable protective clothing.

S60 This material and/or its container must be disposed of as hazardous waste.

S9 Keep container in a well-ventilated place.

S23 Do not breathe vapor.

Canada

This product is exempt from WHMIS label and SDS requirements.

PIN

Not applicable

Ingredients on Ingredient Disclosure List

2-Chloroacetamide

Polyoxyethylated Octyl Phenol

Sodium Azide

Ingredients with unknown toxicological properties

Product is exempt

15.2 Chemical Safety Assessment A Chemical Safety Assessment has not been carried out.

Some hazardous ingredients listed in Section 15 are below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.

Section 16 Other Information

Beckman Coulter Safety Rating	Flammability: 0 Health: 2 Reactivity with Water: 0 Contact: 2	Code 0=None 1=Slight 2=Caution 3=Severe
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Revision Changes

Updated to GHS.

Hazard Class, hazard statements and risk phrase description from section 3

C - Corrosive

N - Dangerous for the environment

T - Toxic

T+ - Very toxic

Repr. Cat. 3 - Toxic for Reproduction Category 3

Xn - Harmful

R22 Harmful if swallowed.

R23/25 Toxic by inhalation and if swallowed.

R25 Toxic if swallowed.

R43 May cause sensitization by skin contact.

Section 16 Other Information (Continued)

R62 Possible risk of impaired fertility.
R28 Very toxic if swallowed.
R32 Contact with acids liberates very toxic gas.
R34 Causes burns.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Aquatic Acute 1 - Aquatic Hazard Acute, Category 1
Aquatic Acute 3 - Aquatic Hazard Acute, Category 3
Acute Tox. Inhal. 3 - Acute Toxicity Inhalation, Category 3
Acute Tox. Oral 2 - Acute Toxicity Oral, Category 2
Acute Tox. Oral 3 - Acute Toxicity Oral, Category 3
Acute Tox. Oral 4 - Acute Toxicity Oral, Category 4
Aquatic Longterm 1 - Aquatic Hazard Long term, Category 1
Skin Corr. 1B - Skin Corrosion Category 1B
Skin Sens. 1 - Skin Sensitization Category 1
Repr. 2 - Toxic to Reproductive Category 2
H300 - Fatal if swallowed.
H301 - Toxic if swallowed.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H331 - Toxic if inhaled.
H361 - Suspected of damaging fertility or the unborn child.
H400 - Very toxic to aquatic life.
H402 - Harmful to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

Abbreviations and Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists
ADR - European Agreement Concerning The International Carriage Of Dangerous Goods By Road
CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act
CLP - Classification, Labeling and Packaging
DFGMAK - Republic Germany's maximum exposure limit
GHS - Globally Harmonized System
HCS - Hazard Communication Standard
IARC - Internal Agency for Research on Cancer
IATA - International Air Transport Association
ICAO - International Civil Aviation Organization
IMDG - International Maritime Dangerous Goods
IOELVs - European Unions' Indicative Occupational Exposure Limit Values
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PBT - Persistent bioaccumulative and toxic substances

Section 16 Other Information (Continued)

SARA - Superfund Amendments and Reauthorization Act
TDG - Canadian Transportation Of Dangerous Goods Regulations.
UN GHS - United Nations Globally Harmonized System
US DOT - United States Department of Transportation
WHMIS - Workplace Hazardous Material Information System
vPvB - Very persistent and very bioaccumulative substances

For further information, please contact your local Beckman Coulter, Inc. representative.

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