

Material Safety Data Sheet
Calcium chloride, 0.025 M**Section 1 - Chemical Product and Company Identification****MSDS Name:**

Calcium chloride, 0.025 M

Catalog Numbers:

022925, 022925DEM, 100309, 100314, 176149, 250309, 250314, CMS022925, CMS176149

Synonyms:

None.

Company Identification:Fisher Diagnostics
Fisher Scientific Company LLC
8365 Valley Pike
Middletown, VA 22645-0307**Company Phone Number:**

(800) 528-0494

Emergency Phone Number:

(800) 528-0494

CHEMTREC Phone Number:

800-424-9300

CHEMTREC (International):

703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent	EINECS/ ELINCS
7732-18-5	Water	99.7125	231-791-2
10043-52-4	Calcium chloride	0.2775	233-140-8
26628-22-8	Sodium azide	0.01	247-852-1

Section 3 - Hazards Identification**EMERGENCY OVERVIEW***Appearance: clear, colorless liquid**Caution! May cause eye, skin, and respiratory tract irritation.**Target Organs: none.***Potential Health Effects****Eye:**

May cause eye irritation.

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May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract. May cause cardiac disturbances.

Inhalation:

May cause respiratory tract irritation.

Chronic:

No information found.

Section 4 - First Aid Measures**Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin:

Get medical aid if irritation develops or persists.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

Inhalation:

Get medical aid if cough or other symptoms appear.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature:

Not applicable.

Explosion Limits:

Lower: Not available. Upper: Not available.

Flash Point:

Not applicable.

NFPA Rating:

(estimated) Health: 1; Flammability: 0; Reactivity: 0

Section 6 - Accidental Release Measures**General Information:**

Use proper personal protective equipment as indicated in Section 8.

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Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Wash thoroughly after handling. Avoid contact with eyes.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

There are no special ventilation requirements.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Calcium chloride	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Sodium azide	0.29 mg/m ³ Ceiling (as NaN ₃); 0.11 ppm Ceiling (vapor, as hydrazoic acid)	0.1 ppm Ceiling (as HN ₃); 0.3 mg/m ³ Ceiling (as NaN ₃)	None of the components are on this list.

OSHA Vacated PELs

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Protective garments not normally required.

Clothing:

Protective garments not normally required.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: clear, colorless

Odor: Odorless.

pH: No information found

Vapor Pressure: 100 mm Hg

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Vapor Density: No information found
Evaporation Rate: No information found
Viscosity: No information found
Boiling Point: 100°C (212.00°F)
Freezing/Melting Point: No information found
Decomposition Temperature: No information found
Solubility in water: Not available.
Specific Gravity/Density: 1.08 (water=1)
Molecular Formula: Not applicable.
Molecular Weight: No information found

Section 10 - Stability and Reactivity**Chemical Stability:**

Stable.

Conditions to Avoid:

None reported.

Incompatibilities with Other Materials

None.

Hazardous Decomposition Products

None.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information**RTECS:**

CAS# 7732-18-5: ZC0110000.

CAS# 10043-52-4: EV9800000.

CAS# 26628-22-8: VY8050000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 10043-52-4:

Oral, mouse: LD50 = 1940 mg/kg

Oral, rabbit: LD50 = 1384 mg/kg

Oral, rat: LD50 = 1 gm/kg.

CAS# 26628-22-8:

Inhalation, mouse: LC50 = 32400 ug/m3

Inhalation, rat: LC50 = 37 mg/m3

Oral, mouse: LD50 = 27 mg/kg

Oral, rat: LD50 = 27 mg/kg

Skin, rabbit: LD50 = 20 mg/kg

Skin, rat: LD50 = 50 mg/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

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CAS# 10043-52-4: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 26628-22-8: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

No information found

Neurotoxicity:

No information found

Other:

See actual entry in RTECS for complete information.

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

US EPA guidelines for the classification determination are listed in 40 CFR Part 261.3.

Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P Series Wastes

CAS# 26628-22-8: waste number P105.

RCRA U Series Wastes

None of the components are on this list.

Section 14 - Transport Information**US DOT****Proper Shipping Name:** No information found**Hazard Class:****UN Number:****Packing Group:****Canadian TDG**

No information found

Section 15 - Regulatory Information**US Federal**

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CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 10043-52-4 is listed on the TSCA Inventory.
CAS# 26628-22-8 is listed on the TSCA Inventory.

Health and Safety Reporting List

None of the components are on this list.

Chemical Test Rules

None of the components are on this list.

TSCA Section 12b

None of the components are on this list.

TSCA Significant New Use Rule (SNUR)

None of the components are on this list.

CERCLA Hazardous Substances and corresponding RQs

CAS# 26628-22-8: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

CAS# 26628-22-8: 500 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solvent form)

SARA Hazard Categories

CAS# 10043-52-4: acute, chronic, reactive.
CAS# 26628-22-8: acute, chronic, reactive.

CERCLA/SARA Section 313

Sodium azide is not at a high enough concentration to be reportable under Section 313.

Clean Air Act - Hazardous Air Pollutants (HAPs)

None of the components are on this list.

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

None of the components are on this list.

Clean Water Act - Priority Pollutants

None of the components are on this list.

Clean Water Act - Toxic Pollutants

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

US State**State Right to Know**

Sodium azide can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Regulations

CAS# 7732-18-5: No information found
CAS# 10043-52-4: No information found
CAS# 26628-22-8: No information found

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Hazard Symbols:

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 7732-18-5: No information found

CAS# 10043-52-4: 0

CAS# 26628-22-8: 2

United Kingdom Occupational Exposure Limits

No information found

Canadian DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 10043-52-4 is listed on Canada's DSL List.

CAS# 26628-22-8 is listed on Canada's DSL List.

Canadian WHMIS Classifications

No information found

Canadian Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 10043-52-4 is not listed on Canada's Ingredient Disclosure List.

CAS# 26628-22-8 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 26628-22-8: OEL-AUSTRALIA:TWA 0.1 ppm (0.3 mg/m3)

OEL-BELGIUM:STEL 0.11 ppm (0.3 mg/m3)

OEL-DENMARK:TWA 0.3 mg/m3

OEL-FINLAND:TWA 0.1 ppm (0.3 mg/m3);STEL 0.3 ppm (0.9 mg/m3)

OEL-FRANCE:STEL 0.1 ppm (0.3 mg/m3)

OEL-GERMANY:TWA 0.07 ppm (0.2 mg/m3)

OEL-THE NETHERLANDS:TWA 0.1 ppm (0.3 mg/m3)

OEL-SWITZERLAND:TWA 0.07 ppm (0.2 mg/m3)

OEL-UNITED KINGDOM:TWA 0.1 ppm (0.3 mg/m3);STEL

OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV

OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Other Information

Color information has been

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