



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Intracellular FCM System: sc-45063

BACKGROUND

Intracellular flow cytometry provides a powerful, newly optimized approach for quantitative analysis of expression of a broad range of cell signaling proteins. Santa Cruz Biotechnology, Inc. now offers the widest range of fluorochrome coupled antibody reagents specifically formatted for this application.

PRODUCT

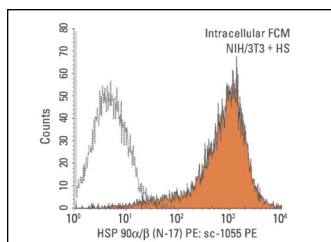
The Intracellular FCM System includes one bottle each of the following reagents: FCM Lysing solution, FCM Fixation buffer, FCM Permeabilization buffer and FCM Wash buffer. The contents of each bottle provide sufficient reagent for 100 tests. The products comprising the Intracellular FCM System have been optimized for intracellular flow cytometry studies using PE- and FITC-conjugated monoclonal and polyclonal purified antibodies developed by Santa Cruz Biotechnology for this purpose.

INTRACELLULAR FCM REAGENTS

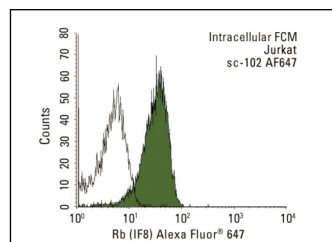
FCM Lysing solution	sc-3621	100 tests
FCM Fixation buffer	sc-3622	100 tests
FCM Permeabilization buffer	sc-3623	100 tests
FCM Wash buffer	sc-3624	100 tests
Intracellular FCM System	sc-45063	100 tests

Lysing solution and support buffers have been optimized for Intracellular FCM studies using PE- and FITC-conjugated monoclonal and polyclonal purified antibodies developed by Santa Cruz Biotechnology, Inc. for this purpose. The Intracellular FCM System includes one bottle each of the following reagents: FCM Lysing solution, FCM Fixation buffer, FCM Permeabilization buffer and FCM Wash buffer.

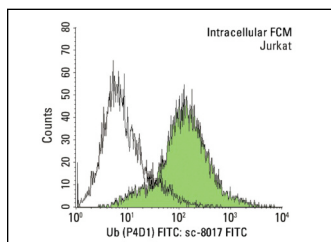
DATA



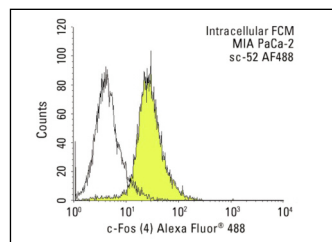
HSP 90 α / β (N-17) PE: sc-1055 PE. Intracellular FCM analysis of fixed and permeabilized, heat-shocked NIH/3T3 cells. Black line histogram represents the isotype control, normal goat IgG: sc-3992.



Rb (IF8) AF647: sc-102 AF647. Intracellular FCM analysis of fixed and permeabilized Jurkat cells. Black line histogram represents the isotype control, normal mouse IgG₁: sc-24636.



Ub (P4D1) FITC : sc-8017 FITC. Intracellular FCM analysis of methanol permeabilized Jurkat cells. Solid black line histogram represents control mouse IgG₁.



c-Fos (4) AF488: sc-52 AF488. Intracellular FCM analysis of fixed and permeabilized MIA PaCa-2 cells. Black line histogram represents the isotype control, normal rabbit IgG: sc-45068.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Material Safety Data Sheet

FCM Lysing Solution (1X): sc-45063

DESCRIPTION

FCM Lysing Solution (1X) can be used to lyse red blood cells following antibody labeling of hematopoietic cells. FCM Lysing Solution (1X) maintains leukocyte viability, and enhances light scatter separation of lymphocyte and red blood cell debris when analyzed by flow cytometry.

Product size: 100 tests in 150 ml.

APPLICATION NOTES

Intracellular Staining

1. Prepare cells by stimulating with appropriate activation agent, if applicable. Be sure to have an unstimulated control.
2. Harvest cells into 50 ml conical tubes. Spin down cells for 5 minutes at 2000 rpm and remove media.
3. Resuspend each tube of cells in 20 ml of room temperature 1x PBS. Perform cell count.
4. Spin down cells for 5 minutes at 2000 rpm and remove PBS. Wash once in 50 ml of 4° C 1x PBS. Centrifuge for 5 minutes at 2000 rpm and remove PBS.
5. Add 1 ml of 4° C FCM fixation buffer (sc-3622) for every 1x10⁶ cells and incubate on ice for 15–30 minutes.
6. Wash cells twice in 50 ml of 4° C 1x PBS, then centrifuge and remove second wash.
Add 1 ml of -20° C FCM permeabilization buffer (sc-3623) for every 1x10⁶ cells dropwise while vortexing. Incubate on ice for 15 minutes.
7. Spin down cells in permeabilization buffer, wash twice with 4° C FCM wash buffer (sc-3624).
8. Centrifuge cells for 5 minutes at 2000 rpm and remove buffer. Add 1 ml of FCM wash buffer per 1x10⁷ cells, then aliquot 100 µl of cells (1x10⁶) into separate sample tubes.
9. Stain cells intracellularly by adding 20 µl of the fluorochrome-conjugated antibody or isotype control to the appropriate tube and incubate for 1 hour at room temperature in the dark.

NOTE: Titration of the fluorochrome-conjugated antibody should be performed for optimal results.

10. Wash cells twice with 1 ml of FCM wash buffer (sc-3624) then resuspend cells in 500 µl of fresh FCM wash buffer. Perform flow cytometric analysis within 24 hours.

WARNING

FCM Lysing Solution (1X) contains ammonium chloride; NH₄Cl (CAS#12125-02-9, EC#2351864). Ammonium chloride is toxic; If inhaled, remove to fresh air. In case of skin contact, flush with water and remove contaminated articles. In case of eye contact, flush with water. In case of swallowing, induce vomiting and wash out mouth with water. Always wear full length clothing, safety gloves, and safety glasses in a well-ventilated area.

STORAGE

Store at 4° C.

FOR RESEARCH USE ONLY; NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Santa Cruz Biotechnology shall not be held liable for any damage resulting from handling or from contact with the product.



Material Safety Data Sheet

FCM Fixation Buffer (10X): sc-45063

DESCRIPTION

The FCM Fixation buffer (10X) can be used to preserve hematopoietic cells prior to antibody-based intracellular protein labeling for flow cytometry.

Product size: 100 tests in 10 ml.

WARNING

FCM Fixation buffer (10X) contains formaldehyde (CAS#30525-89-4). Formaldehyde is a suspected carcinogen and is toxic.

HAZARDS IDENTIFICATION

May cause allergic respiratory and skin reactions. material is reactive with the mucous membranes and upper respiratory tract, eyes and skin. May be harmful if swallowed, inhaled or absorbed through the skin. may lead to death as a result of spasm, inflammation and edema of the larynx and brochi, chemical pneumonitis and pulmonary edema. Symptoms of over-exposure include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea or vomiting.

FIRST AID MEASURES

Following inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

In case of swallowing: Wash out mouth with water. Seek immediate medical attention.

After contact with skin: Immediately remove contaminated clothing and shoes and wash exposed area with large quantities of water. Flush with lukewarm water for at least 15 minutes. Seek immediate medical attention if required.

After contact with the eyes: Immediately flush eyes with water for at least 15-20 minutes, holding eyelids apart. Seek immediate medical attention if required.

In all cases, contact a physician. Always wear full length clothing, safety gloves, and safety glasses and work in a well-ventilated area.

FIRE FIGHTING MEASURES

Flash point: 185° F

Boiling point: 101° C

Extinguishing media: CO₂, dry chemical powder, alcohol or polymer foam

Hazardous decomposition products: Toxic fumes of carbon monoxide or carbon dioxide.

Special firefighting procedures: Wear OSHA/MSHA approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire & explosive hazards: This material, like most materials in powder form, is capable of creating a dust explosion. Under fire conditions, material may decompose and form flammable and/or explosive mixtures in the air. Emits toxic fumes under fire conditions.

APPLICATION NOTES

Intracellular Staining

1. Prepare cells by stimulating with appropriate activation agent, if applicable. Be sure to have an unstimulated control.
2. Harvest cells into 50 ml conical tubes. Spin down cells for 5 minutes at 2000 rpm and remove media.
3. Resuspend each tube of cells in 20 ml of room temperature 1x PBS. Perform cell count.
4. Spin down cells for 5 minutes at 2000 rpm and remove PBS. Wash once in 50 ml of 4° C 1x PBS. Centrifuge for 5 minutes at 2000 rpm and remove PBS.
5. Add 1 ml of 4° C FCM fixation buffer (sc-3622) for every 1x10⁶ cells and incubate on ice for 15–30 minutes.
6. Wash cells twice in 50 ml of 4° C 1x PBS, then centrifuge and remove second wash.

Add 1 ml of -20° C FCM permeabilization buffer (sc-3623) for every 1x10⁶ cells dropwise while vortexing. Incubate on ice for 15 minutes.

7. Spin down cells in permeabilization buffer, wash twice with 4° C FCM wash buffer (sc-3624).

8. Centrifuge cells for 5 minutes at 2000 rpm and remove buffer. Add 1 ml of FCM wash buffer per 1x10⁷ cells, then aliquot 100 µl of cells (1x10⁶) into separate sample tubes.

9. Stain cells intracellularly by adding 20 µl of the fluorochrome-conjugated antibody or isotype control to the appropriate tube and incubate for 1 hour at room temperature in the dark.

NOTE: Titration of the fluorochrome-conjugated antibody should be performed for optimal results.

10. Wash cells twice with 1 ml of FCM wash buffer (sc-3624) then resuspend cells in 500 µl of fresh FCM wash buffer. Perform flow cytometric analysis within 24 hours.

STORAGE

Store at 4° C.

FOR RESEARCH USE ONLY; NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Santa Cruz Biotechnology shall not be held liable for any damage resulting from handling or from contact with the product.

OTHER INFORMATION

Recommended usage and restriction: Only for trained staff.

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Material Safety Data Sheet

FCM Permeabilization buffer (1X): sc-45063

DESCRIPTION

The FCM permeabilization buffer (1X) can be used to permeabilize cells prior to antibody-based intracellular protein labeling for flow cytometry.

Product size: 100 tests in 100 ml.

APPLICATION NOTES

Intracellular Staining

1. Prepare cells by stimulating with appropriate activation agent, if applicable. Be sure to have an unstimulated control.
2. Harvest cells into 50 ml conical tubes. Spin down cells for 5 minutes at 2000 rpm and remove media.
3. Resuspend each tube of cells in 20 ml of room temperature 1x PBS. Perform cell count.
4. Spin down cells for 5 minutes at 2000 rpm and remove PBS. Wash once in 50 ml of 4° C 1x PBS. Centrifuge for 5 minutes at 2000 rpm and remove PBS.
5. Add 1 ml of 4°C FCM fixation buffer (sc-3622) for every 1x10⁶ cells and incubate on ice for 15–30 minutes.
6. Wash cells twice in 50 ml of 4° C 1x PBS, then centrifuge and remove second wash.

Add 1 ml of -20° C FCM permeabilization buffer (sc-3623) for every 1x10⁶ cells dropwise while vortexing. Incubate on ice for 15 minutes.

7. Spin down cells in permeabilization buffer, wash twice with 4° C FCM wash buffer (sc-3624).
8. Centrifuge cells for 5 minutes at 2000 rpm and remove buffer. Add 1 ml of FCM wash buffer per 1x10⁷ cells, then aliquot 100 µl of cells (1x10⁶) into separate sample tubes.
9. Stain cells intracellularly by adding 20 µl of the fluorochrome-conjugated antibody or isotype control to the appropriate tube and incubate for 1 hour at room temperature in the dark.

NOTE: Titration of the fluorochrome-conjugated antibody should be performed for optimal results.

10. Wash cells twice with 1 ml of FCM wash buffer (sc-3624) then resuspend cells in 500 µl of fresh FCM wash buffer. Perform flow cytometric analysis within 24 hours.

WARNING

FCM Permeabilization buffer (1X) contains methanol; CH₃OH (CAS#67-56-1, UN#1230, ERG #131). Methanol is toxic and flammable; If inhaled, remove to fresh air. In case of skin contact, flush with water and remove contaminated articles. In case of eye contact, flush with water. In case of swallowing, induce vomiting and wash out mouth with water. Always wear full length clothing, safety gloves, and safety glasses in a well-ventilated area. Avoid overheating, sparks, and flames.

STORAGE

Store at -20° C.

FOR RESEARCH USE ONLY; NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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Material Safety Data Sheet

FCM Wash buffer (1X): sc-45063

DESCRIPTION

The FCM Wash buffer (1X) can be used as a cell wash buffer for flow cytometry.

Product size: 100 tests in 125 ml.

APPLICATION NOTES

Intracellular Staining

1. Prepare cells by stimulating with appropriate activation agent, if applicable. Be sure to have an unstimulated control.
2. Harvest cells into 50 ml conical tubes. Spin down cells for 5 minutes at 2000 rpm and remove media.
3. Resuspend each tube of cells in 20 ml of room temperature 1x PBS. Perform cell count.
4. Spin down cells for 5 minutes at 2000 rpm and remove PBS. Wash once in 50 ml of 4° C 1x PBS. Centrifuge for 5 minutes at 2000 rpm and remove PBS.
5. Add 1 ml of 4°C FCM fixation buffer (sc-3622) for every 1x10⁶ cells and incubate on ice for 15–30 minutes.
6. Wash cells twice in 50 ml of 4° C 1x PBS, then centrifuge and remove second wash.

Add 1 ml of -20° C FCM permeabilization buffer (sc-3623) for every 1x10⁶ cells dropwise while vortexing. Incubate on ice for 15 minutes.

7. Spin down cells in permeabilization buffer, wash twice with 4° C FCM wash buffer (sc-3624).
8. Centrifuge cells for 5 minutes at 2000 rpm and remove buffer. Add 1 ml of FCM wash buffer per 1x10⁷ cells, then aliquot 100 µl of cells (1x10⁶) into separate sample tubes.
9. Stain cells intracellularly by adding 20 µl of the fluorochrome-conjugated antibody or isotype control to the appropriate tube and incubate for 1 hour at room temperature in the dark.

NOTE: Titration of the fluorochrome-conjugated antibody should be performed for optimal results.

10. Wash cells twice with 1 ml of FCM wash buffer (sc-3624) then resuspend cells in 500 µl of fresh FCM wash buffer. Perform flow cytometric analysis within 24 hours.

WARNING

FCM Wash buffer (1X) contains 0.2% sodium azide which is known to be toxic. Avoid contact with skin, eyes, and mucous membranes.

STORAGE

Store at 4° C.

FOR RESEARCH USE ONLY; NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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Material Safety Data Sheet

FCM Wash buffer (1X)



The Power to Question

(contains Sodium Azide)

Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium Azide
Catalog Numbers: sc-3624

Synonyms: Sodium salt of hydrazoic acid; Smite; Azium.

Company Identification:
Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, CA 95060

For information, call: 800.457.3801 / 831.457.3800/ 831.457.3801

Emergency Number: 831.457.3800 x121/ 831.251.2170

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
26628-22-8	Sodium azide	>99	247-852-1
7732-18-5	Water	<0.5	231-791-2

Hazard Symbols: T+ N

Risk Phrases: 28 32

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless to white crystals. May cause cardiac disturbances. **Danger!** Heat sensitive. May be fatal if inhaled, absorbed through the skin or swallowed. Dangerous for the environment. Contact with acids liberates very toxic and explosive gas, hydrazoic acid vapor. Heating may cause an explosion. Reacts with many heavy metals to form explosive compounds. Forms hydrazoic acid in water which volatilizes readily at 99°F. Hydrazoic acid is a colorless, volatile, highly toxic and highly explosive liquid with a characteristic odor, which has been described as sickening. Causes eye, skin, and respiratory tract irritation.

Target Organs: Central nervous system, lungs, cardiovascular system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation. Contact with dust or vapor may cause systemic toxic effects.

Skin: Causes skin irritation. May be fatal if absorbed through the skin. If absorbed, causes symptoms similar to those of ingestion.

Ingestion: May be fatal if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Sodium azide may cause hypotension (abnormally low blood pressure), tachycardia (rapid heart rate), tachypnea (quick, shallow breathing), hypothermia (low body temperature), convulsions and severe headache.

Inhalation: May be fatal if inhaled. Dust is irritating to the respiratory tract. May cause effects similar to those described for ingestion. Rapidly absorbed. The vapor of hydrazoic acid may be present where sodium azide is handled. Symptoms of acute exposure to hydrazoic acid include eye irritation, headache, dramatic decrease in blood pressure, weakness, pulmonary edema, and collapse.

Chronic: Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: POISON material. If inhaled, get medical aid immediately. Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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. Vapors may form an explosive mixture with air. Water Reactive. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Forms explosion sensitive compounds with some metals such as lead and copper. Form hydrazoic acid vapor in contact with acid or water. Hydrazoic acid vapor is highly toxic and a dangerous explosive. Hydrazoic acid is shock sensitive.

Extinguishing Media: Use dry chemical, carbon dioxide, or alcohol-resistant foam. Do NOT get water inside containers.

Flash Point: Not applicable.

Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 4; Flammability: 1; Instability: 3; Special Hazard: -W-

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Remove all sources of ignition. Provide ventilation. Do not flush down the drain. Over a period of time, sodium azide may react with copper, lead, brass, or solder in plumbing systems to form an accumulation of the highly explosive compounds of lead azide and copper azide.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use only with adequate ventilation. Do not use with metal spatula or other metal items.

Storage: Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from water. Keep away from acids. Do not store in metal containers. Keep containers tightly closed. Some have recommended storage in an explosion-proof refrigerator.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium azide	0.29 mg/m ³ Ceiling (as sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid, vapor)	none listed	none listed
Water	none listed	none listed	none listed
Hydrazoic acid	none listed	none listed	none listed

OSHA Vacated PELs: Sodium azide: No OSHA Vacated PELs are listed for this chemical. Water: No OSHA Vacated PELs are listed for this chemical. Hydrazoic acid: No OSHA Vacated PELs are listed for this chemical.

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: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Crystals

Appearance: colorless to white

Odor: odorless

pH: Not available.

Vapor Pressure: Negligible.

Vapor Density: 2.2

Evaporation Rate:negligible

Viscosity: Not applicable.

Boiling Point: Not applicable.

Freezing/Melting Point:527 deg F (dec)

Decomposition Temperature:527 deg F

Solubility: Soluble.

Specific Gravity/Density:1.85

Molecular Formula:N₃Na

Molecular Weight:65.01

Section 10 - Stability and Reactivity

Chemical Stability: Stable. However, may decompose if heated. May be shock-sensitive.

Conditions to Avoid: Mechanical shock, light, contact with water, temperatures above 275°C.

Incompatibilities with Other Materials: Acids, some metals, oxidizing agents.

Hazardous Decomposition Products: Nitrogen oxides, sodium oxide, hydrazoic acid.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 26628-22-8: VY8050000

CAS# 7732-18-5: ZC0110000

CAS# 7782-79-8: MW2800000

LD50/LC50:

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;

CAS# 7732-18-5:

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

CAS# 7782-79-8:

Inhalation, mouse: LC50 = 34 mg/m3;

Oral, rat: LD50 = 33 mg/kg;

Carcinogenicity:

CAS# 26628-22-8: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 7782-79-8: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.**Teratogenicity:** No information found.**Reproductive Effects:** No information available.**Neurotoxicity:** See actual entry in RTECS for complete information.**Mutagenicity:** See actual entry in RTECS for complete information.**Other Studies:** See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Fish: Rainbow trout: LC50 = 0.8-1.6 mg/L; 96 Hr.; 13 degrees C; Bluegill/Sunfish: LC50 = 0.7-0.8 mg/L; 96 Hr.; 18 degrees C
No data available.**Environmental:** Aquatic Fate: Photolysis of sodium azide may result in metal nitrides initially, with the eventual formation of the free metal and nitrogen gas.**Physical:** No information available.**Other:** Harmful to aquatic life in very low concentrations.

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 Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: CAS# 26628-22-8: waste number P105.**RCRA U-Series:** None listed.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	SODIUM AZIDE				SODIUM AZIDE
Hazard Class:	6.1				6.1
UN Number:	UN1687				UN1687
Packing Group:	II				II

Section 15 - Regulatory Information

US FEDERAL**TSCA**

CAS# 26628-22-8 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

CAS# 7782-79-8 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA**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 TP Q does not default to 10000 pounds for non-powder, non-molten, non-so lvent form)

SARA Codes

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

Section 313

This material contains Sodium azide (CAS# 26628-22-8, 99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 26628-22-8 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7782-79-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

T+ N

Risk Phrases:

R 28 Very toxic if swallowed.

R 32 Contact with acids liberates very toxic gas.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 60 This material and its container must be disposed of as hazardous waste.

S 28A After contact with skin, wash immediately with plenty of water.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 26628-22-8: 2

CAS# 7732-18-5: No information available.

CAS# 7782-79-8: No information available.

Canada - DSL/NDSL

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

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

CAS# 7782-79-8 is listed on Canada's NDSL List.

Canada - WHMIS

This product has a WHMIS classification of D1A, D2B, F.

Canadian Ingredient Disclosure List

CAS# 26628-22-8 is listed on the Canadian Ingredient Disclosure List.

CAS# 7782-79-8 is listed on the Canadian 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) OE

L-UNITED KINGDOM:TWA 0.1 ppm (0.3 mg/m3);STEL OEL IN BULGARIA, COLOMB

IA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIET

NAM check ACGI TLV

CAS# 7782-79-8: OEL-DENMARK:STEL 0.1 ppm (0.2 mg/m3) OEL-GERMANY:TW

A 0.1 ppm (0.27 mg/m3) OEL-SWITZERLAND:TWA 0.1 ppm (0.18 mg/m3);STEL

0.2 ppm OEL-UNITED KINGDOM:STEL 0.1 ppm (vapor) OEL IN BULGARIA, COL

OMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, V

IETNAM check ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 10/01/04

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