MATERIAL SAFETY DATA SHEET (MSDS)

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EM SCIENCE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer.....:
EM SCIENCE
A Division of EM Industries
P.O. Box 70
480 Democrat Road
Gibbstown, N.J. 08027

Preparation Date.: 2/4/97

Information Phone Number.: 609-423-6300
Hours: Mon. to Fri. 8:30-5
Chemtrec Emergency Number: 800-424-9300
Hours: 24 hrs a day

Catalog Number(s):

SX0299 SX0300 0066884R 0066885B

Product Name:
Sodium Azide
Synonyms:
Azium
Chemical Family:
Salt
Formula:
NaN_3
Molecular Weight.:
65.01

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS #	Appr %
Sodium Azide	26628-22-8	100%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
POISONOUS SOLID.
FORMS SHOCK SENSITIVE MIXTURES WITH CERTAIN MATERIALS.
May React With Copper Or Lead Plumbing To Form Explosive Metal Azides.
CONTACT WITH ACID LIBERATES POISONOUS GAS.

Appearance:
Colorless crystals, odorless

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

Symptoms of Exposure:
POISON!
Toxic by ingestion and skin contact.
May cause severe headache, dizziness, faintness, nausea, low blood pressure, kidney damage.

Medical Cond. Aggravated by Exposure:
Data not available.

Routes of Entry:
Inhalation, ingestion or skin contact.

Carcinogenicity:
The material is not listed (IARC, NTP, OSHA) as cancer causing agent.

4. FIRST AID MEASURES

Emergency First Aid:
GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.
Skin: Immediately flush thoroughly with large amounts of water.
Eyes: Immediately flush thoroughly with water for at least 15 minutes.
Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped.
Ingestion: If conscious, drink water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.
Remove contaminated clothing and wash before reuse.

5. FIRE FIGHTING MEASURES

Flash Point (F): N/A
Flammable Limits LEL (%): N/A
Flammable Limits UEL (%): N/A
Extinguishing Media:
Dry chemical

Fire Fighting Procedures:
Wear self-contained breathing apparatus.

Fire & Explosion Hazards:
Forms highly sensitive explosive compounds with heavy metals such as lead, silver and copper.
When heated to 350C it decomposes exothermically, burning

with a very hot flame and producing nitrogen and molten sodium.

6. ACCIDENTAL RELEASE MEASURES

Spill Response:
Evacuate the area of all unnecessary personnel.
Wear suitable protective equipment listed under Exposure / Personal Protection.
Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards.
Contain the release and eliminate its source, if this can be done without risk.
Take up and containerize for proper disposal as described under Disposal.
Comply with Federal, State, and local regulations on reporting releases. Refer to Regulatory Information for reportable quantity and other regulatory data.

7. HANDLING AND STORAGE

Handling & Storage:
Store in a cool, well-ventilated area in an explosion-proof building.
Store away from acids.
Do not store in metal containers other than steel.
Motors and wiring should be enclosed.
Recommend high standard of cleanliness including personal hygiene and clean clothing each day.
Keep container tightly closed.
Do not breathe dust.
Do not get in eyes, on skin, or on clothing.
Retained residue may make empty containers hazardous; use caution!

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:
Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:
Material must be handled or transferred in an approved fume hood or with equivalent ventilation.
Protective gloves must be worn to prevent skin contact (Neoprene or equivalent)
Safety glasses with side shields must be worn at all times.
Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified

conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.
Impervious protective clothing should be worn to prevent skin contact.

Work/Hygenic Practices:
Wash thoroughly after handling.
Do not take internally.
Eye wash and safety equipment should be readily available.

EXPOSURE GUIDELINES

OSHA - PEL:

	TWA		STEL		CL		
Component	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	Skin
Sodium Azide					0.1	0.3	X

ACGIH - TLV:

	TWA		STEL		CL		
Component	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	Skin
Sodium Azide			0.11	0.29	0.11	0.29	

If there are no exposure limit numbers listed in the Exposure Guidelines chart, this indicates that no OSHA or ACGIH exposure limts have been established.

9. PHYSICAL AND CHEMCIAL PROPERTIES

Boiling Point (C 760 mmHg) : N/A
Melting Point (C) : 275C Decomposes
Specific Gravity (H20 = 1) : 1.846
Vapor Pressure (mm Hg) : N/A
Percent Volatile by vol (%): N/A
Vapor Density (Air = 1) : N/A
Evaporation Rate (BuAc = 1): N/A
Solubility in Water (%) : Soluble
Appearance :
Colorless crystals, odorless

10. STABILITY AND REACTIVITY

Stability: Yes

Hazardous Polymerization:

Does not occur

Hazardous Decomposition:
Na_2O, NO_x

Conditions to Avoid:
Heat; any contact with the metals brass, copper, silver, gold, zinc, lead or their alloys.

Materials To Avoid:

( ) Water
(X) Acids
( ) Bases
( ) Corrosives
(X) Oxidizers
( ) Other:

11. TOXICOLOGICAL INFORMATION

Toxicity Data

orl-rat LD50: 27 mg/kg skn-rbt LD50: 20 mg/kg

Toxicological Findings:
Tests on laboratory animals indicate material may produce adverse mutagenic effects and cause tumors.
Cited in Registry of Toxic Effects of Chemical Substances (RTECS)

12. DISPOSAL CONSIDERATIONS

EPA Waste Numbers: P105

Treatment:
Specified Technology - Contact your local permitted waste disposal site (TSD) for permissible treatment sites.
ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

13. TRANSPORT INFORMATION

DOT Proper Shipping Name:
Sodium Azide

DOT ID Number :
UN1687

14. REGULATORY INFORMATION

TSCA Statement:
The CAS number of this product is listed on the TSCA Inventory.

Component	SARA EHS (302)	SARA EHS TPQ (lbs)	CERCLA RQ (lbs)
Sodium Azide	Y	500	1000

Component	OSHA Floor List	SARA 313	DeMinimis for SARA 313 (%)
Sodium Azide	Y	Y	1.0

If there is no information listed on the regulatory information chart, this indicates that the chemical is not covered by the specific regulation listed.

15. OTHER INFORMATION

Comments:
None

NFPA Hazard Ratings:

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Health          : 3
Flammability    : 1
Reactivity      : 2
Special Hazards :
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Revision History: 8/1/83 10/27/87 10/5/88 3/1/91 3/10/95

| = Revised Section

N/A = Not Available

N/E = None Establised

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