

**MATERIAL SAFETY DATA SHEET FOR  
EZ COMPLEMENT SENSITIZED CELLS:**

**Sodium Azide (Pgs. 2 – 8)**

**THE FOLLOWING COMPOUND IS FOUND IN OUR  
EZ COMPLEMENT SENSITIZED CELLS**

**SECTION 1 : PRODUCT IDENTIFICATION**

**Name:** Sodium azide

**Synonyms:** Azide, sodium, Smite, RCRA Waste No. P105

**CAS No.:** 26628-22-8

**EC No.:** 247-852-1

**Molecular Weight:** 65.01

**Chemical Formula:** NaN<sub>3</sub>

**Product Codes:** 0639

**Manufacturer Information:**

Amresco Inc.

30175 Solon Industrial Parkway

Solon, Ohio 44139

For Information: (800) 448-4442 or (440) 349-1199

Emergency Telephone Number: CHEMTREC – (800) 424-9300

**SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS**

**Ingredient:** Sodium Azide

**CAS No.:** 26628-22-8

**Percent:** >99 %

**Hazardous:** Yes

**SECTION 3 : HAZARDS IDENTIFICATION**

**Label Precautionart Statements:**

HIGHLY TOXIC (USA),

VERY TOXIC (EU),

IRRITANT, IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

MAY CAUSE HERITABLE GENETIC DAMAGE.

VERY TOXIC BY INHALATION, IN CONTACT WITH SKIN, AND IF SWALLOWED

CONTACT WITH ACID LIBERATES VERY TOXIC GAS.

HEATING MAY CAUSE AN EXPLOSION

READILY ABSORBED THROUGH SKIN.

AVOID CONTACT WITH METALS.

TARGET ORGANS: NERVES, HEART.

IN CASE OF ACCIDENT , OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY  
(SHOW LABEL WHERE POSSIBLE).

WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.

DO NOT BREATHE DUST.

**SECTION 4 : FIRST AID MEASURES**

**Skin Contact:**

In case of contact immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before re-use.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion:**

If swallowed, wash out mouth with water provided the person is conscious. Call a physician

**SECTION 5 : FIRE FIGHTING MEASURES**

**Fire Extinguishing Media:**

Do not use water.

Dry chemical powder.

**Special Firefighting Procedures:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual Fire and Explosions Hazards:**

Container explosion may occur under fire conditions. Emits toxic fumes under fire conditions.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

**Instructions:**

Evacuate Area

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.

**Spills:**

Sweep up, place into a bag and hold for waste disposal.

Avoid raising dust.

Ventilate area and wash spill site after material pickup is complete.

**SECTION 7 : HANDLING AND STORAGE**

(Refer to Section 8)

**Additional Information:**

Azide reacts with many heavy metals such as lead, copper, mercury, silver, and gold to form explosive compounds. Copper and lead azides are more sensitive than nitroglycerine. Azide reacts with metal halides to give a range of metal azide halides, many of which are explosive. Incompatible with chromyl chloride, hydrazine, bromine, carbon disulfide, dimethyl sulfate, dibromomalonitrile. An explosion occurred when a mixture of sodium azide, methylene chloride, dimethyl sulfoxide and sulfuric acid were being concentrated on a rotary evaporator.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.  
Use only in chemical fume hood.  
Maintain safety shower and eye bath.  
Do not breathe dust.  
Do not get into eyes, on skin or on clothing.  
Avoid prolonged or repeated exposure.  
Wash thoroughly after handling.  
Highly toxic.  
Irritant.  
Keep tightly closed.  
Heat-sensitive.  
Store in a cool, dry place.

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Solid.  
**Odor:** Odorless.  
**Solubility:** 42 g/100 g water @ 17C (63F)  
**Specific Gravity:** 1.85

**SECTION 10 : STABILITY AND REACTIVITY**

**Incompatibilities:**

Acid chlorides  
Halogenated solvents  
Avoid contact with metals  
Avoid contact with acid  
Explodes when heated.

**Hazardous Decomposition Products:**

Nitrogen oxides

**SECTION 11 : TOXICOLOGICAL INFORMATION**

**Acute Effects:** May be fatal if inhaled, swallowed or absorbed through skin.  
Causes eye and skin irritation.  
Material is irritating to mucous membranes and upper respiratory tract.  
Exposure can cause nausea, headache and vomiting.

**Chronic effects:**  
May alter genetic material.  
Target organs: Nerves, heart, brain

**Additional Information:**  
Laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect, demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, hepatic and cerebral effects.

**RTECS #:** VY8050000 SODIUM AZIDE

**Toxicity Data:**  
ORL-WMN LDLO: 786 mg/kg (1989) & 14 mg/kg (1990)  
ORL-MAN LDLO: 29 mg/kg (1989) & 129 mg/kg (1996) & 143 mg/kg (1986)  
ORL-RAT LD50: 27 mg/kg (1991)  
ORL-MUS LD50: 27 mg/kg (CLDND)  
ORL-BWD LD50: 23700 ug/kg (1983)  
SCU-RAT LD50: 45100 ug/kg (1961)  
SCU-MUS LD50: 23060 ug/kg (1961)  
ITR-RAT LD50: 47500 ug/kg (1961)  
IPR-MUS LD50: 28mg/kg (1948)  
IVN-MUS LD50: 19mg/kg (CLDND)  
UNR-MUS LD50: 27 mg/kg (1952)  
SKIN-RBT LD50: 20 mg/kg (1991)

**Target Organ Data:**  
Brain and coverings (increased cranial pressure)  
Peripheral nerve & sensation [spastic paralysis with/without sensory sense organs and special senses (mydriasis)]  
Behavioral (general anesthetic, somnolence, convulsions or effect on seizure threshold, change in motor activity, coma, headache, irritability)  
Cardiac (arrythmias, pulse rate decreased with fall in BP, change in force of contraction, other changes)  
Vascular (BP lowering)  
Respiratory, Lungs, Thorax (acute pulmonary edema, dyspnae, respiratory stimulation, other changes)

**SECTION 11 : TOXICOLOGICAL INFORMATION (cont.)**

Gastrointestinal (hypermotility, diarrhea)  
Kidney, Ureter, Bladder (other changes)  
Only selected registry of toxic effects of chemical substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

**SECTION 12 : ECOLOGICAL INFORMATION**

Data not yet available.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

Contact a licensed, professional waste disposal service to dispose of this material.  
Observe all Federal, State and local environmental regulations.

**SECTION 14 : TRANSPORT INFORMATION**

**Domestic (Land, D.O.T.)**

**Proper Shipping Name:** SODIUM AZIDE  
**Hazard Class:** 6.1  
**UN/NA:** UN1687  
**Packing Group:** II

**SECTION 15 : REGULATORY INFORMATION**

**European Information:**

**Ingredient:** Sodium Azide (26628-22-8)  
**EC Index #:** 011-004-00-7 Very Toxic  
**R:** 26/27/28 -Very toxic by inhalation, in contact with skin and if swallowed. Irritant.  
**R:** 36/37/38 -Irritating to eyes, respiratory system and skin  
**R:** 40 -Possible risk of irreversible effects  
**S:** 36/37/39 -Wear suitable protective clothing, gloves and eye/face protection.

**SECTION 15 : REGULATORY INFORMATION (cont.)**

**Reviews, Standards, and regulations:**

**OEL = MAK**

**OEL-Australia** (TWA 0.1 ppm, 1993), **Belgium** (STEL 0.1 ppm, 1993), **Denmark** (TWA 0.3 mg/m<sup>3</sup>, 1993), **Finland** (TWA 0.1 ppm, 1993), **France** (STEL 0.1ppm, 1993), **Germany** (TWA 0.07 ppm, 1993), **Netherlands** (TWA 0.1 ppm, 1993), **Switzerland** (TWA 0.1 ppm, 1993), UK (TWA 0.1 ppm, 1993), in **Bulgaria, Colombia, Jordan, Korea, New Zealand, Singapore, Vietnam** check ACGIH TLV

**NIOSH:** Rel to Sodium Azide, as HN3-Air:CL 0.1 ppm (SK)  
NIOSH DHHS # 92-100, 1992

**NOHS 1974:** HZD 68820; NIS 13; TNF 877; NOS 10; TNE 5953

**NOES 1983:** HZD 68820; NIS 19; TNF 3640; NOS 27; TNE54959; TFE 38370

**EPA GENETOX PROGRAM 1988:**

**Positive:** L5178Y cells in vitro-TK test, d-melanogaster sex-linked lethal, *S. cerevisiae* gene conversion and forward mutation and reversion

**Negative:** In vitro cytogenetics-human lymphocyte, sperm morphology-mouse, in vitro UDS-human fibroblast, TRP reversion

**Inconclusive:** carcinogenicity-mouse/rat, TRP reversion

**EPA TSCA Section 8(B) Chemical Inventory**

**EPA TSCA Section 8(D) Unpublished health/safety studies on EPA IRIS database**

**EPA TSCA Test submission (TSCATS) database, Apr 1997**

**NIOSH Current Intelligence Bulletin 13, 1976**

**NTP Carcinogenesis studies (GAVAGE): No evidence: Rat –NTPTR NTP-TR-389,91**

**U.S Information**

This product is subject to SARA Section 313 reporting requirements

**SECTION 16 : OTHER INFORMATION**

No additional data available.

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