



TOSOH

MATERIAL SAFETY DATA SHEET

MANUFACTURER: Tosoh Bioscience, Inc.
3600 Gantz Road
Grove City, OH 43123

DISTRIBUTOR: Tosoh Bioscience, Inc.
6000 Shoreline Court, Suite 101
South San Francisco, CA 94080

PRODUCT INFORMATION (6-5 PST): 1-800-248-6764

MEDICAL EMERGENCIES (24 HR): HAZARD INFORMATION SERVICES
1-800-228-5635
(612) 221-3999

DOT EMERGENCY PHONE (24 HR): HAZARD INFORMATION SERVICES
1-800-228-5635
(612) 221-3999

SECTION 1: MANUFACTURER / DISTRIBUTOR / MATERIAL IDENTIFICATION

IDENTIFICATION:

PRODUCT NAME:	PART NUMBER:
AIA-PACK Wash Concentrate Set	020955

SECTION 2: HAZARDOUS COMPONENTS

COMPONENT:	CAS #:	PERCENT:
Sodium Azide	(26628-22-8)	<1.0
Proclin 300		<1.0

EXPOSURE LIMITS:

AEL (ACGIH): None established
TLV (ACGIH): 5 mg/m³ TWA respirable dust

PEL (OSHA): Sodium azide: 0.3 mg/M³ (8-hr TWA) total dust
Sodium azide: 0.1 ppm

SECTION 3: PHYSICAL DATA

Boiling Point:	n/av	pH:	7 - 8
Melting Point:	n/av	Odor:	none
Specific Gravity:	n/av	Form:	powder or liquid
Vapor Pressure:	n/av	Color:	white or clear
Vapor Density: (water = 1)	n/av		
Solubility in Water:	soluble		
Evaporation Rate: (water = 1)	n/av		

SECTION 4: FIRE AND EXPLOSIVE DATA

FIRE AND EXPLOSION HAZARDS: Dust forms explosive mixture with air. Contact with acids and acidic material may cause generation of very irritating, flammable hydrazoic acid gas.

EXTINGUISHING MEDIA: Use water, water spray, water fog, chemical foam, "alcohol foam", dry powder (sand or Met-L-X), dry chemical or CO₂.

SPECIAL FIRE FIGHTING INSTRUCTIONS: Prevent contact with acid and acidic solutions. These generate hydrazoic acid gas, which is flammable. Wear self-contained breathing apparatus if solution could be exposed to acid or acidic solution in fire.

SECTION 5: HAZARDOUS REACTIVITY

INSTABILITY: Reacts with copper, lead, silver, mercury (elemental), gold, carbon, carbon disulfide, Br₂, HNO₃, (benzoyl chloride + KOH) to form explosives.

INCOMPATIBILITY: Incompatible with acids. Lowering the pH of azide solutions below 6.0 may generate very irritating and flammable hydrazoic acid gas.

DECOMPOSITION: Decomposes with heat.

POLYMERIZATION: Will not occur.

SECTION 6: HEALTH HAZARDS

ROUTES OF ENTRY: Eye contact, skin contact, ingestion, inhalation.

ACUTE EFFECTS OF INHALATION: May provoke respiratory allergy (hay fever, asthma) in susceptible persons. Symptoms may appear within 0 - 12 hours after exposure. Contains sodium azide which can form hydrazoic acid vapors. Hydrazoic acid vapors: inhalation-rat LCLo: 1100 ppm/1 hr; inhalation-human TClO: 300 ppb; sickening odor, very irritating, effects increase with increased exposure: headache, decrease in blood pressure, weakness, faintness, blurred vision, shortness of breath, stuffiness, dizziness or collapse, heart palpitations. Recovery usually occurs within 1 hour. Inhalation of 0.5 ppm causes headache and nasal stuffiness; higher concentrations cause gagging.

SKIN: Sensitization can occur. Allergic reaction can produce contact dermatitis or eczema (inflammation characterized by redness, itching, weeping, oozing, and crusting of skin). For sodium azide, skin LD50: 20 mg/kg; affects central nervous system; however, minimum hazard at <0.1%.

EYE: Sensitization can occur. Allergic reaction can produce itching, redness or swelling of tissue around the eyes in sensitive individuals. The lyophilized product could also cause mechanical irritation. Hydrazoic acid vapors are very irritating.

INGESTION: Allergic rash may develop in some individuals. For sodium azide: oral-mouse LD50: 27 mg/kg; oral-human TDLo: 0.7 mg/kg; ingesting 50 mL of 0.1% azide can affect central nervous system: dizziness, weakness, blurred vision, etc. and decrease in blood pressure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with low blood pressure may have increased susceptibility to the toxic effects of overexposure to this substance due to the presence of sodium azide.

EFFECTS OF REPEATED EXPOSURE: Some sensitive individuals may develop allergy with symptoms of hay fever, asthma and tightness of chest, rash or dermatitis.

TARGET ORGANS: Nervous system, circulatory system.

CHRONIC EFFECTS: Sodium azide is undergoing carcinogenesis bioassay under the National Toxicology Program (NTP). It was included in the EPA Genetic Toxicology Program, January 1984. It was found to produce tumors when given orally to rats. Haskell Lab evaluated the rat studies and concluded sodium azide does not pose a hazard according to corporate guidelines for control of carcinogenic risks.

REPRODUCTIVE OR DEVELOPMENTAL EFFECTS: Sodium azide injected at low doses into chick embryos was associated with developmental abnormalities. It is known to be a potent mutagen. Haskell Labs evaluated the test data and concluded that sodium azide does not pose a hazard according to corporate guidelines for control of reproductive risks.

SECTION 7: SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

SAFETY PRECAUTIONS: Do not breathe dust. Avoid contact with eyes and skin. Avoid direct contact by using proper protective articles: closed toe shoes, lab coats, gloves, etc. Wash thoroughly after handling.

FIRST AID:

INHALATION: Move to fresh air. If not breathing give artificial respiration. If breathing is difficult or labored, give oxygen and seek medical attention.

SKIN CONTACT: Immediately wash affected area with soap and copious amounts of water.

EYE CONTACT: Immediately flush with copious amounts of water. Ensure that both upper and lower eye lids are flushed thoroughly. Remove contact lenses and continue flushing eyes for at least 15 minutes. Seek medical attention immediately.

INGESTION: Induce vomiting immediately after giving two glasses of water. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately. Consult a physician if rash develops within 12 hours of ingestion of material.

WASTE DISPOSAL: Materials containing low concentrations of sodium azide must be disposed of cautiously. If poured down a drain with copper or lead piping, flush with copious amounts of water. If drains are not thoroughly flushed, highly explosive copper azide or lead azide may form. Both of these azides are hazardous even in small amounts. Ensure that disposal is in compliance with local, state and federal regulations.

SPILL, LEAK OR RELEASE: Review Section 4: FIRE AND EXPLOSION DATA and Section 8: SPECIAL PROTECTION INFORMATION before proceeding with cleanup. Do not attempt to clean up chemical spills without appropriate personal protective equipment. Wipe up spill. Clean area with 20% bleach (sodium hypochlorite). Dispose of towels or absorbent used to wipe up the spill in a hazardous disposal container.

SECTION 8: SPECIAL PROTECTION INFORMATION / CONTROL MEASURES

PERSONAL PROTECTION: Prevent skin contact by wearing proper protective articles: gloves, lab coat, etc.

SAFETY EQUIPMENT: Eyewash fountain and safety shower.

ENGINEERING CONTROLS: Ensure that ventilation is adequate.

GENERAL: Use good personal and industrial hygiene practices. Wash thoroughly after using product. Keep product off clothing and equipment. Launder contaminated clothing before reuse. Do not eat, drink or smoke in any work area.

November 30, 2005