TOSOH

HC #03
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Status	Item Num	Catalog N	Mfg Abbv	MSDS	Description	Description 2
	367246	020351	TOSOH	03	ASSAY, THYROID CALI ZERO & POS	(4X1ML)D/S
	367524	020358	TOSOH	03	ASSAY, AIA CAL ST T4 (12X1ML)	D/S
	368240	020368	TOSOH	03	ASSAY, FREE THYROX CAL 6 LVL(1	2X1ML)D/S
	368242	020370	TOSOH	03	ASSAY, T4 UPTAKE CAL ST 2LVL(4	X5ML)D/S
	369190	020365	TOSOH	03	ASSAY, HORMONE FSH CALIBRATOR	SET(4X1ML)D/S
DGM	369191	020366	TOSOH	03	ASSAY, HORMONE/HGH CALIBRATOR	SET(12X1ML)D/S
	369193	020374	TOSOH	03	ASSAY, HORMONE ESTRADIOL CALIB	(12X1ML)D/S
	369194	020381	TOSOH	03	ASSAY, HORMONE PROG CALIBRATOR	(12X1ML)D/S
	369209	020353	TOSOH	03	ASSAY, FER CALIBRATOR SET (4X1	ML) D/S
	369210	020363	TOSOH	03	ASSAY, PSA CALIBRATOR SET (4X1	ML) (4/ST)D/S
	369215	020392	TOSOH	03	FOLATE, CALIBRATOR SET 6LVL 12	X1ML D/S
	369219	020355	TOSOH	03	PROLACTIN, CALIBRATOR SET (4/S	T)D/S
DGM	377442	020364	TOSOH	03	CALIBRATOR SET, LH D/S	
	377444	020393	TOSOH	03	CALIBRATOR SET, B-12 (6VL/ST)	D/S
	381249	020361	TOSOH	03	CALIBRATOR, BHCG D/S	
	402186	020387	TOSOH	03	CALIBRATOR SET, AIA PACK CORT	(200/ST)D/S
	402187	020384	TOSOH	03	CALIBRATOR SET, AIA-PACK C-CEP	(200/ST)D/S
	415595	020359	TOSOH	03	ASSAY, AIA-PACK BMG CALIB SET	12X1ML D/S
	415599	020356	TOSOH	03	ASSAY, AIA-PACK HCG CALIB SET	4X1ML D/S
	415603	020394	TOSOH	03	ASSAY, A1A-PACK 3RD GEN CALIB	12X1ML D/S
	415606	020382	TOSOH	03	ASSAY, A1A-PACK TT3 CALIB SET	12X1ML D/S
	415609	020386	TOSOH	03	ASSAY, A1A-PACK FT3 CALIB SET	12X1ML D/S
	415611	020352	TOSOH	03	ASSAY, A1A-PACK AFP CALIB 4X1	ML D/S
	415615	020388	TOSOH	03	ASSAY, A1A-PACK CA125 CALIB 1	2X1ML D/S
DGM	415618	02034	TOSOH	03	ASSAY, A1A-PACK CEA CALIB SET	4X1ML D/S
	415619	020354	TOSOH	03	ASSAY, A1A-PACK CEA CALIB SET	4X1ML D/S
	415623	020396	TOSOH	03	ASSAY, A1A-PACK LH II CALIB	12X1ML D/S
	455012	020362	TOSOH	03	ASSAY, PAP CALIBRATOR SET 4X1M	L ZERO & POS
	455016	020302	TOSOH	03	ASSAY, CA 27.29 CALIBRATOR SET	12X1ML D/S
	455019	020371	TOSOH	03	ASSAY, CA 19-9 CALIBRATOR SET	12X1ML D/S
	467855	020369	TOSOH	03	CALIBRATOR SET, CKMB 6 LEVEL D	/S
	467859	025397	TOSOH	03	CALIBRATOR SET, MYOGLOBIN D/S	
	467862	025305	TOSOH	03	CALIBRATOR SET, TROP 2ND GEN	6 LEVEL D/S
	479502	020360	TOSOH	03	ASSAY, A1A-PACK, IRI CALIB SET	12X1 D/S
	479503	020390	TOSOH	03	ASSAY, A1A-PACK CALIB SET 6LVL	12X1 D/S
	479729	025374	TOSOH	03	ASSAY, A1A-PACK E2 CALIBRATOR	SET
	479730	025396	TOSOH	03	ASSAY, A1A-PACK LHII CALIB ST6	12X1ML
	480449	025304	TOSOH	03	CALIBRATOR SET, ST AIA-PK 6LEV	EL 12X1ML (1/ST) D/S
	492421	020391	TOSOH	03	ASSAY, AIA PK CALIBRATOR 6 LEV	EL 12X1ML

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MATERIAL SAFETY DATA SHEET

MANUFACTURER: TOSOH Corporation
Shiba-koen First Building
3-8-2 Shiba, Minato-ku,
Tokyo 105-8623 Japan

DISTRIBUTOR: TOSOH MEDICS, Inc.
347 Oyster Point Blvd., Suite 201
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: AIA-PACK Calibrator Series (i.e., AIA-PACK AFP Calibrator Set)
ST AIA-PACK Calibrator Series (i.e., ST AIA-PACK E2 Calibrator Set)

PART NUMBER: 0203xx (i.e., 020352 for AIA-PACK AFP Calibrator Set)
0253xx (i.e., 025374 for ST AIA-PACK E2 Calibrator Set)

SECTION 2: HAZARDOUS COMPONENTS

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

EXPOSURE LIMITS:

AEL (ACGIH):None established
TLV (ACGIH): 5 mg/m^3 TWA respirable dust
Sodium azide: 0.3 mg/M^3 (8-hr TWA) total dust

PEL (OSHA): 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 hyrazoic 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 if 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 carcinogenisis 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 19, 2001