

Conforms to 93/112/EC and ISO 11014-1 Responsible Name: Diazyme Administration

Effective: 02/01/11

SECTION 1: PRODUCT and COMPANY IDENTIFICATION

PRODUCT NAME:
Carbon Dioxide Enzymatic Assay
Reagent R1
Carbon Dioxide Calibrator
Carbon Dioxide Control
DZ122A-CAL
DZ122A-CAL
DZ122A-C1V,
DZ122A-C2V

Supplier: Diazyme Laboratories

12889 Gregg Court Poway, CA 92064, USA 858-455-4768 Manufacturer: Diazyme Laboratories

12889 Gregg Court Poway, CA 92064, USA 858-455-4768 Authorized Representative: MDSS GmbH

Schiffgraben 41 30175 Hannover Germany

In case of Emergency: Call Diazyme Laboratories (858-455-4768)

Intended Use: Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

SECTION 2: HAZARDOUS INGREDIENTS

Product	Ingredient	Amount	CAS#	EINECS #	Symbols	R-Phrase	S-Phrase
Reagent R1	Tris(hydroxymethyl)aminomethane	1.2%	77-86-1	201-064-4	XI	36/37/38	None Listed
	1,2-Propanediol	5%	57-55-6	200-338-0	None Listed	None Listed	26-37/39
Calibrator	Sodium Azide	0.05%	26628-22-8	2478521	None Listed	None Listed	None Listed
Control	Sodium Azide	0.05%	26628-22-8	2478521	None Listed	None Listed	None Listed

NOTE: Physical and health hazard information on reagent mixtures has not been determined. Any physical and health information noted is based on 1) evaluation of data for the pure ingredients, and 2) concentration of ingredients as packaged.

Sodium Azide, 0.05%

To the best of our knowledge, this product contains no hazardous ingredients as defined by OSHA, or WHMIS.

NOTE: Physical and health hazard information on reagent mixtures has not been determined. Any physical and health information noted is based on 1) evaluation of data for the pure ingredients, and 2) concentration of ingredients as packaged.

SECTION 3: HAZARD INDENTIFICATION

TRIS(HYDROXYMETHYL)AMINOMETHANE:

EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin. The toxicological properties of this material have not been fully investigated. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye: Causes eye irritation.
Skin: Causes skin irritation.

Ingestion: May cause severe gastrointestinal tract irritation with nausea,

vomiting and possible burns. May cause liver and kidney damage. The toxicological properties of this substance have not been fully investigated. May cause metabolic changes including hypoglycemia, and hyperkalemia. May depress respi-

ratory center.

Inhalation: May cause irritation of the respiratory tract with burning pain

in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. The toxicological properties of

this substance have not been fully investigated.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

May cause liver and kidney damage.

1.2-PROPANEDIOL:

EMERGENCY OVERVIEW

Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye: May cause slight transient injury.

Skin: May be absorbed through damaged or abraded skin in harmful amounts. Allergic reactions have been reported. A single

prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts. Prolonged contact is essentially non-irritating to skin. Repeated exposures may

cause problems.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting

and diarrhea. Low hazard for usual industrial handling. May cause hemoglobinuric nephrosis. May cause changes in sur-

face EEG.

Inhalation: Low hazard for usual industrial handling. Inhalation of a mist

of this material may cause respiratory tract irritation. Material has a low vapor pressure, so exposure to vapor is not likely.

Chronic: Exposure to large doses may cause central nervous system

depression. Chronic ingestion may cause lactic acidosis and possible seizures. Exposures to propylene glycol having no adverse effects on the mother should have no effect on the fetus. Birth defects are unlikely. In animal studies, propylene glycol has been shown not to interfere with reproduction.

MSDS 1022 Rev E Page 1 of 8



Conforms to 93/112/EC and ISO 11014-1

Responsible Name: Diazyme Administration
Effective: 02/01/11

		Tris(hydroxymethyl)aminomethane	1,2-Propanediol
	HEALTH:	2	0
HMIS RATING	FLAMMABILITY:	0	1
	REACTIVITY:	0	0
	HEALTH:	2	0
NFPA RATING	FLAMMABILITY:	0	1
	REACTIVITY:	0	0
HAZARD SYMBOLS:		XI	N/A
	R-Phrase:	36/37/38	None Listed
	S-Phrase:	26-37/39	24/25

SODIUM AZIDE

EMERGENCY OVERVIEW

POISON! DANGER! MAY BE FATAL IF SWALLOWED OR ABSORBED THROUGH SKIN, HARMFUL IF INHALED. HAZARDOUS SOLID. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE OR EXPLOSION. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM, KIDNEYS, AND CARDIOVASCULAR SYSTEM.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 4 - Extreme (Poison) Flammability Rating: 1 - Slight

Reactivity Rating: 4 - Extreme (Explosive)

Contact Rating: 4 - Extreme (Life)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER

Storage Color Code: Yellow Stripe (Store Separately)

Potential Health Effects

Inhalation:

May cause irritation to the respiratory tract and mucous membranes, sore throat, coughing, dizziness, shortness of breath, and fainting. May be absorbed through inhalation. Symptoms may parallel ingestion.

Ingestion

Highly Toxic! May cause breathlessness, pulmonary edema and rapid heart beat within 5 minutes. Nausea, vomiting, headache, restlessness, and diarrhea may occur within 15 minutes. Other symptoms may include low blood pressure, abnormal breathing, reduced body temperature, reduced body pH, convulsions, collapse and death. **Skin Contact:**

Highly Toxic! Causes irritation, redness, and pain. May be absorbed through the skin; symptoms may parallel ingestion.

Eye Contact:

Causes irritation, redness, pain, and blurred vision.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

SECTION 4: FIRST AID MEASURES

TRIS(HYDROXYMETHYL)AMINOMETHANE:

Eyes: Flush eyes with plenty of water for at least 15 minutes,

occasionally lifting the upper and lower eyelids. Get

medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of water for at

least 15 minutes while removing contaminated clothing

and shoes. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk

or water. Never give anything by mouth to an uncons-

cious person. Get medical aid.

Inhalation: Get medical aid immediately. Remove from exposure

and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen.

Notes to Physician: Treat symptomatically and supportively.

1,2-PROPANEDIOL:

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, flush skin with plenty of water.

Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing be-

fore reuse.

Ingestion: 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: If inhaled, remove to fresh air. If not breathing, give

artificial respiration. If breathing is difficult, give oxy-

gen. Get medical aid.

Notes to Physician: Persons with impaired kidney function may be more

susceptible to the effects of this substance. Treat symp-

tomatically and supportively.

MSDS 1022 Rev E Page 2 of 8



Conforms to 93/112/EC and ISO 11014-1 Responsible Name: Diazyme Administration

Effective: 02/01/11

SODIUM AZIDE

Inhalation:

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

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:

Wipe off excess material from skin then immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician:

Accidental ingestion of sodium azide is potentially life threatening. Treatment includes gastric lavage, followed by saline catharsis. EKG and blood pressure monitoring and support are recommended.

SECTION 5: FIRE FIGHTING MEASURES

TRIS(HYDROXYMETHYL)AMINOMETHANE:

General Information: As in any fire, wear a self-contained breathing

apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or

combustion.

Extinguishing Media: In case of fire, use water, dry chemical, chemical

foam, or alcohol-resistant foam.

1.2-PROPANEDIOL:

General Information: As in any fire, wear a self-contained breathing

apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or

combustion.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or

alcohol-resistant foam.

SODIUM AZIDE

Fire:

Combustible solid. May pose a fire hazard upon heating, shock, concussion, or friction.

Explosion

Decomposes explosively upon heating, shock, concussion, or friction. Reacts with both copper and lead to produce explosive azides. Explosions in laboratory plumbing containing these metals is possible. Sensitive to mechanical impact.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire exposed containers cool. Poisonous gases are produced in fire, including nitrogen oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

TRIS(HYDROXYMETHYL)AMINOMETHANE:

General Information: Use proper personal protective equipment as

indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precau-

tions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

1,2-PROPANEDIOL:

General Information: Use proper personal protective equipment as

indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite,

sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide

ventilation.

SODIUM AZIDE

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

SECTION 7: HANDLING AND STORAGE

TRIS(HYDROXYMETHYL)AMINOMETHANE:

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventila-

tion. Avoid contact with eyes, skin, and clothing. Keep con-

MSDS 1022 Rev E Page 3 of 8



Conforms to 93/112/EC and ISO 11014-1

Responsible Name: Diazyme Administration

Effective: 02/01/11

tainer tightly closed. Avoid ingestion and inhalation. Discard Store in a tightly closed container. Store in a cool, dry, well-

ventilated area away from incompatible substances. Keep

away from acids. Keep containers tightly closed. Store pro-

contaminated shoes.

Handling: Wash thoroughly after handling. Remove contaminated

clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep con-

tainer tightly closed. Avoid ingestion and inhalation.

Store in a tightly closed container. Store in a cool, dry, wellventilated area away from incompatible substances. Store

protected from moisture.

tected from moisture. Store at room temperature. **1,2-PROPANEDIOL:**

SODIUM AZIDE

Storage:

Store in a tightly closed container. Store in a cool, dry, ventilated area away from sources of heat or ignition. Protect container from physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

TRIS(HYDROXYMETHYL)AMINOMETHANE:

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 77-86-1:

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 expo-

A respiratory protection program that meets OSHA's 29 CFR Respirators:

1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace condi-

tions warrant respirator use.

1,2-PROPANEDIOL:

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 57-55-6:

Storage:

United Kingdom, WEL - TWA: 150 ppm TWA (total particulate and vapor); 474 mg/m3 TWA (total particulate and United Kingdom, WEL - STEL: 450 ppm STEL (total particulate and vapor); 1422 mg/m3 STEL (total particulate Russia: 7 mg/m3 TWA (particulates)

Personal Protective Equipment

Wear appropriate protective eyeglasses or chemical safety Eyes:

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 expo-

A respiratory protection program that meets OSHA's 29 CFR Respirators:

1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace condi-

tions warrant respirator use.

SODIUM AZIDE

Airborne Exposure Limits:

-NIOSH Recommended Exposure Limit (REL):

0.1 ppm skin as HN3, 0.3 mg/m3 skin as NaN3 (Ceilings)

-ACGIH Threshold Limit Value (TLV):

0.11 ppm as HN3, 0.29 mg/m3 as Na N3 (Ceilings), A4 Not classifiable as a human carcinogen.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus. Breathing air quality must meet the requirements of the OSHA respiratory protection standard (29CFR1910.134).

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

TRIS(HYDROXYMETHYL)AMINOMETHANE:

Color: white amine-like Odor: **Physical State:** Solid pH: 10.36(aq. solution)

MSDS 1022 Rev E Page 4 of 8



Conforms to 93/112/EC and ISO 11014-1

Vapor Pressure: Not available Viscosity: Not available

Boiling Point: 219-220 deg C @ 10 mm Hg

Freezing/Melting Point: 171.2-172.3 deg C **Autoignition Temperature:** Not available. Flash Point: Not available **Explosion Limits: Lower:** Not available **Explosion Limits: Upper:** Not available **Decomposition Temperature:** Not available Solubility in water: Moderately Soluble Specific Gravity/Density: Not available. Molecular Formula: (CH2OH)3CNH2

Molecular Weight: 121.14

1,2-PROPANEDIOL:

Physical State: Liquid

Color: colorless viscous

SODIUM AZIDE

Appearance:

Colorless crystals.

Odor: Odorless. Solubility:

42 g/100 g water @ 17C (63F)

Specific Gravity:

1.85

pH: No information found.

% Volatiles by volume @ 21C (70F):

Boiling Point:

Not applicable.

Melting Point:

275 (decomposes to sodium and nitrogen)

Vapor Density (Air=1):

2.2

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

Responsible Name: Diazyme Administration
Effective: 02/01/11

Odor: Odorless pH: Not available

 Vapor Pressure:
 0.08 mm Hg @ 20 deg C

 Viscosity:
 58.1 cps @ 20 deg C

 Boiling Point:
 187 deg C (368.60°F)

 Freezing/Melting Point:
 -60 deg C (-76.00°F)

 Autoignition Temperature:
 371 deg C (699.80 deg F)

 Flash Point:
 99 deg C (210.20 deg F)

SECTION 10: STABILITY AND REACTIVITY

TRIS(HYDROXYMETHYL)AMINOMETHANE:

Chemical Stability: Stable under normal tempera-

tures and pressures.

Conditions to Avoid: Dust generation, exposure to

moist air or water.

Incompatibilities with Other Materials Strong oxidizing agents, strong

acids.

Hazardous Decomposition Products Nitrogen oxides, carbon monox-

ide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization Will not occur.

1,2-PROPANEDIOL:

Chemical Stability: Stable under normal tempera-

tures and pressures. Hygroscopic: absorbs moisture or water from

the air.

Conditions to Avoid: Excess heat, moist air.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dio-

xide, aldehydes.

Hazardous Polymerization: Will not occur.

SODIUM AZIDE

Stability:

Stable under ordinary conditions of use and storage. Decomposes explosively upon heating, shock, concussion, or friction.

Hazardous Decomposition Products:

Explodes upon decomposition liberating nitrogen gas (N2) and sodium (Na).

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Benzoyl chloride plus potassium hydroxide, bromine, carbon disulfide, chromyl chloride, copper, dibromalononitrile, dimethyl sulfate, lead, barium carbonate, sulfuric MSDS 1022 Rev E

Page 5 of 8



Conforms to 93/112/EC and ISO 11014-1 Responsible Name: Diazyme Administration

Effective: 02/01/11

acid, water, and nitric acid.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

SECTION 11: TOXICOLOGICAL INFORMATION

TRIS(HYDROXYMETHYL)AMINOMETHANE:

RTECS#: CAS# 77-86-1: TY2900000

LD50/LC50: RTECS:

CAS# 77-86-1: Oral, rat: LD50 = 5900 mg/kg;.

Carcinogenicity: Tris (hydroxymethyl) aminomethane - Not listed as a

carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

1,2-PROPANEDIOL:

RTECS#: CAS# 57-55-6: TY2000000

LD50/LC50: RTECS:

CAS# 57-55-6: Draize test, rabbit, eye: 100 mg Mild;

Draize test, rabbit, eye: 500 mg/24H Mild;

Oral, mouse: LD50 = 22 gm/kg; Oral, mouse: LD50 = 20300 mg/kg; Oral, rabbit: LD50 = 18500 mg/kg; Oral, rat: LD50 = 20 gm/kg; Skin, rabbit: LD50 = 20800 mg/kg; Skin, rabbit: LD50 = 20800 mg/kg;

Carcinogenicity: Propylene glycol - Not listed as a carcinogen by AC-

GIH, IARC, NTP, or CA Prop 65.

Other: Standard Draize Test: Administration into the eye (rab-

bit) = 100 mg (Mild). Standard Draize Test: Administration into the eye (rabbit) = 500 mg/24H (Mild). Standard Draize Test: Administration onto the skin (human) = 500 mg/7days (Mild). Standard Draize Test: Administration onto the skin (human) = 104 mg/3 days-

Intermittent (Moderate).

SODIUM AZIDE

Oral rat LD50: 27 mg/kg Skin rabbit LD50: 20 mg/kg.

Inhalation rat LC50: 37 mg/m3 Investigated as a tumorigen and mutagen.

-----\Cancer Lists\-----

---NTP Carcinogen---

Ingredient Known Anticipated IARC Category

Sodium Azide (26628-22-8) No No None

SECTION 12: ECOLOGICAL INFORMATION

TRIS(HYDROXYMETHYL)AMINOMETHANE:

Other: No information available.

1,2-PROPANEDIOL:

Ecotoxicity: Water flea Daphnia: EC50 > 10000 mg/L; 48 Hr; Unspeci-

fied

Bacteria: Phytobacterium phosphoreum: EC50 = 710 mg/L;

30 min; Microtox test

Fish: Goldfish: LC50 > 5000 mg/L; 24 Hr; Unspecified Fish: Guppy: LC50 > 1000 mg/L; 48 Hr; Unspecified

SODIUM AZIDE

Environmental Fate:

When released into the soil, this material is not expected to biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the air, this material may be moderately degraded by photolysis.

Environmental Toxicity:

Dangerous to the environment. Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment. Freshwater Fish Species Data: 96 Hr LC50 Oncorhynchus mykiss: 0.8 mg/L:

96 Hr LC50 Oncornynchus mykiss: 0.8 mg/L

96 Hr LC50 Lepomis macrochirus: 0.7 mg/L;

96 Hr LC50 Pimephales promelas: 5.46 mg/L [flow-through]

SECTION 13: DISPOSAL CONSIDERATIONS

TRIS(HYDROXYMETHYL)AMINOMETHANE:

Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary

according to location. Contact a specialist disposal company or the local authority or advice. Empty containers must be decontaminated before returning for recycling.

1,2-PROPANEDIOL:

MSDS 1022 Rev E Page 6 of 8



Conforms to 93/112/EC and ISO 11014-1

Responsible Name: Diazyme Administration

Effective: 02/01/11

Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local au-

thority or advice. Empty containers must be decontaminated before returning for recycling.

SODIUM AZIDE

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: TRANSPORTATION INFORMATION

TRIS(HYDROXYMETHYL)AMINOMETHANE & 1,2-PROPANEDIOL:

IATA IMO RID/ADR
Not regulated. Not regulated. Not regulated.

Hazard Class: UN Number: Packing Group:

Shipping Name:

SODIUM AZIDE

Domestic (Land, D.O.T.)

Proper Shipping Name: SODIUM AZIDE

Hazard Class: 6.1 UN/NA: UN1687

SECTION 15: REGULATORY INFORMATION

TRIS(HYDROXYMETHYL)AMINOMETHANE:

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin. Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 77-86-1: 1

Canada

CAS# 77-86-1 is listed on Canada's DSL List

US Federal

TSCA

CAS# 77-86-1 is listed on the TSCA Inventory.

SODIUM AZIDE

\Chemical Inventory Status - Part 1\ Ingredient TSCA EC Japan Australia						
Sodium Azide (26628-22-8)	Yes Yes Yes Yes					
\Chemical Inventory Status - Part 2\						
Ingredient	Korea DSL NDSL Phil.					
Sodium Azide (26628-22-8)	Yes Yes No Yes					
\Federal, State & International Regulations - Part 1\						
Ingredient RO	Q TPQ List Chemical Catg.					
Sodium Azide (26628-22-8)	1000 500 Yes No					

1,2-PROPANEDIOL:

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S-24/25: Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 57-55-6: 0

Canada

CAS# 57-55-6 is listed on Canada's DSL List

US Federal

TSCA

CAS# 57-55-6 is listed on the TSCA Inventory.

MSDS 1022 Rev E Page 7 of 8



Conforms to 93/112/EC and ISO 11014-1 Responsible Name: Diazyme Administration

Effective: 02/01/11

-----\Federal, State & International Regulations - Part 2\-----

-RCRA- -TSCA-

SECTION 16: OTHER INFORMATION

PREPARED BY: Diazyme Administration

PHONE NO: 858-455-4768

DATE PREPARED: 25 January 2011

The information provided on this Material Safety Data Sheet is provided in the interest of promoting safe handling of the material. While this information is believed to be correct Diazyme makes no warranty in respect to any of the information disclosed. Observe all federal, provincial, state and local laws concerning health and pollution.

MSDS 1022 Rev E Page 8 of 8