

MATERIAL SAFETY DATA SHEET

Revision Date: December 16, 2011 Approved by: Darius Nicpon

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	Section 1	Chemical Product and Company Name			
Product		DNA PRECIPITATION SOLUTION.	ITEM No: CASE-B028		
	Synonyms	Ethyl alcohol denatured with methanol, Isopropyl , Methyl Isobutyl Ketone			

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

Section 2	n 2 Composition/Ingredients Information				
Chemical Name	CAS#	%	TLV Units		
Ethanol	64-17-5	82.1%	TWA: 1000ppm		
*Denaturants Isopropanol Methanol Methyl isobutyl ketone	67-63-0 67-56-1 108-10-1	12.8% 4.12% 0.87%	TWA: 200ppm STEL: 250ppm		

Section 3 Hazards Identification

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FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED HARMFUL IF ABSORBED THROUGH SKIN, CAUSES EYE IRRITATION. Target organs: liver, kidneys, CNS depressant

- 0 = Minimal 1 = Slight
- 3 = Serious 4 = Severe
- 2 = Moderate



HMIS

Section 4 **First Aid Measures**

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Induce vomiting by medical or experienced first-aid Get medical attention immediately. **INHALATION:** Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if irritation develops.

SKIN CONTACT: Remove contaminated clothing. Flush thoroughly with mild soap and water. Get medical attention if irritation develops.

Section 5 Fire Fighting Measures

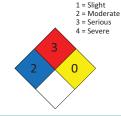
Flammable liquid.

Extinguishing Media: Use TriClass, dry chemical extinguisher or water spray for small fires. Water spray to cool fire-exposed containers and structures. Firefighters should use self-contained breathing apparatus and protective clothing.

Flash point: 58°F

Autoignition temperature: 683°F

Explosion limits: Lower: 3.3% **Upper: 19.0%**



0 = Minimal

Section 6 **Accidental Release Measures**

Restrict unprotected personnel from the area. Contain the spill with an inert absorbent material and deposit in a sealed bag or container. For small spill use paper towel. Place the wet medium under the hood or outside the building to minimize a vapor concentration in the area. Do not leave it unattended. Dry material place in trash. Ventilate and wash spill area with soap and water.

Handling and Storage

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Vapor forms from this product and may travel, or be moved by air currents and ignited by pilot lights, static discharges, flames, sparks, heaters or other ignition sources.

Handling: Use hood or with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor. Wash hands thoroughly after handling. Storage: Flammable cabinet. Keep container in cool, well-ventilated area.

Section 8

Exposure Controls/ Personal Protection

Engineering controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Respiratory protection: Non should be needed if normal laboratory handling at room temperature. Use NIOSH approved respiratory protection in high vapor concentrations.

Section 9 **Physical and Chemical Properties**

Physical state: Liquid

Appearance: Transparent, Colorless, Clear. **Odor:** Strong alcohol odor. Fragrant

A/N:Hq

Vapor Pressure (mm Hg): 42

Vapor Density: 1.6 **Evaporation Rate: 3.1** Viscosity: N/A

Boiling point: 170.6-179.6°F/77-82°C

Melting point: N/A Freezing point: <-80°C/<-112°F

Decomposition temp: N/A

Solubility: Miscible in water and many organic solvents.

Specific gravity ($H_2O = 1$): 0.791 at 20°C Percent volatile (%): 100 Wt%

Molecular formula: Mixture Molecular weight: N/A

Stability and Reactivity Section 10

Chemical Stability: Stable

Conditions to Avoid: High temperatures, sparks open flames and incompatible materials.

Incompatibilities: Strong oxidizing agents, acids, peroxides, acid chlorides, acid anhydrides, alkali metals, ammo-

Hazardous decomposition: N/A

Hazardous polymerization: Will not occur.

Section 11

Toxicological Information

Effects of overexposure: Toxic due to inhalation or ingestion. Ingested doses will produce nausea, dizziness and headache. Material is irritating to eyes and mucous membrane.

ORAL LD₅₀Ethanol: 7060mg/kg [Rat]. 3450mg/kg [Mouse]

VAPOR LC₅₀Ethanol: 20000ppm 8h [Rat]. 39000 mg/m³ 4h [Mouse]

ORAL LD₅₀Isopropyl alcohol: 5045mg/kg[Rat]. 3600mg/kg [Mouse]. 6410 mg/kg [Rabbit]

DERMAL LD₅₀lsopropyl alcohol: 12800 mg/kg 4h [Rabbit].

ORAL LD₅₀Methyl alcohol: 5628mg/kg[Rat]. VAPOR LC₅₀Methyl alcohol: 640000ppm 4h [Rat]. DERMAL LDLD₅₀Methyl alcohol: 15800mg/kg [Rabbit]

Section 12

Ecological Information

Data not available.

Section 13

Disposal Considerations

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

Section 14

Transport Information

UN number: 1987 NA: N/A

Shipping name: ALCOHOLS, NOS

Hazard Class: 3 Packing group: PG II Exceptions: Lty Qty ≤1L

Section 15

Regulatory Information

TSCA-listed, EINECS-listed (200-578-6)

Section 16

Other Information

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