

Dimension(R) system HDL Calibrator

MSDS No.

DEDM004301-00

1. Product and Company Identification

Product Trade Name	Dimension(R) system HDL Calibrator	Validation Date	2 July 2001
Synonyms	High Density Lipoprotein Calibrator	Product Code	DC29
		Internal Code	792029.901
Product Information	800-441-9250	U.N. No.	1274
Manufactured/ Supplied	Dade Behring Inc. P. O. Box 6101 Newark DE 19714 USA		
In Case of Emergency	Transportation: (800) 424-9300 (CHEMTREC) Medical: (800) 228-5635 ext. 284 (Prosar)		

2. Composition and Information on Ingredients

<u>Ingredient Name</u>	<u>Conc. (% w/w)</u>	<u>CAS No.</u>	<u>U.N. No.</u>	<u>EU Symbol</u>	<u>R-Phrases</u>
1) Water	>84	7732-18-5	Not applicable.	Not controlled.	Not controlled under dsd (Europe).
2) PROPANOL	15	71-23-8	UN1274	F	R11

Note: See section 8 for occupational exposure limits and section 11 for LC50/LD50 information.

3. Hazards Identification

Primary Hazards and Critical Effects : WARNING!
 CAUSES SEVERE EYE IRRITATION.
 CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
 GASTROINTESTINAL TRACT, SKIN, EYES, CENTRAL NERVOUS SYSTEM
 FLAMMABLE LIQUID AND VAPOR.
 VAPOR MAY CAUSE FLASH FIRE.
 MAY BE HARMFUL IF SWALLOWED.
 MAY CAUSE SKIN IRRITATION.
 Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Do not ingest. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

4. First Aid Measures

- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
- Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.
- Skin Contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
- Eye Contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

5. Fire-Fighting Measures

- Extinguishing Media** : In case of fire, use water spray (fog), foam, dry chemical, or CO₂. Use foam or all purpose dry chemicals to extinguish.
- Fire-Fighting Procedures** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Fire/Explosion Hazards** : Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Hazardous Decomposition Products** : These products are carbon oxides (CO, CO₂).

6. Accidental Release Measures

- Personal Precautions** : Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5). Do not touch or walk through spilled material.
- Environmental Precautions and Clean-up Methods** : If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. Place spilled material in an appropriate container for disposal.

Note: See section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and Storage

- Handling** : Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Do not ingest. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
- Storage** : Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

8. Exposure Controls and Personal Protection

Occupational Exposure Limits

Ingredient Name

- 1) Deionized Water
- 2) Propyl alcohol

OEL United States

Not available.
 TWA: 200 STEL: 250 (ppm) from ACGIH (TLV) [United States] [1994] SKIN
 TWA: 200 STEL: 250 (ppb) from OSHA (PEL) [United States] [1994] SKIN
 TWA: 200 STEL: 250 (ppm) from NIOSH [United States] [1994] SKIN
 TWA: 500 STEL: 625 (mg/m³) from NIOSH [United States] [1994] SKIN
 TWA: 200 STEL: 250 (ppm) from OSHA (PEL) [United States] [1989] Inhalation
 TWA: 500 STEL: 625 (mg/m³) from OSHA (PEL) [United States] [1989] Inhalation

OEL Canada

Not available.
 Not available.

- Engineering Controls** : Open handling must be limited. Use local exhaust ventilation or handle in a ventilated enclosure.

Personal Protective Equipment

- Respiratory System** : A respirator is not needed under normal and intended conditions of product use.
- Skin and Body** : Disposable outer garments when there is the potential for contact with the material.
- Hands** : Use chemical resistant, impervious gloves.
- Eyes** : Safety glasses. Goggles, face shield, or other full-face protection if potential exists for direct exposure to aerosols or splashes.

9. Physical and Chemical Properties

- Physical State and Appearance** : Liquid.
- Color** : Colorless.
- Melting Point** : May start to solidify at 0°C (32°F) based on data for: Deionized Water. Weighted average: -19.08°C (-2.3°F)
- Boiling Point** : The lowest known value is 97°C (206.6°F) (Propyl alcohol). Weighted average: 99.55°C (211.2°F)

Evaporation Rate	: The highest known value is 0.933 (Propyl alcohol) Weighted average: 0.45 compared to (n-BUTYL ACETATE=1)
Vapor Density	: The highest known value is 201 (Air = 1) (Propyl alcohol).
Vapor Pressure	: The highest known value is 2.4 kPa (@ 20°C) (Deionized Water). Weighted average: 2.32 kPa (@ 20°C)
Specific Gravity	: Weighted average: 0.96 (Water = 1)
Solubility	: Easily soluble in cold water. Partially soluble in hot water, methanol, diethyl ether, acetone.
Auto-Ignition Temperature	: The lowest known value is 412°C (773.6°F) (Propyl alcohol).
Flash Point	: CLOSED CUP: 42°C (107.6°F).
Explosion Limits	: The greatest known range is LOWER: 2.2% UPPER: 13.7% (Propyl alcohol)

10. Stability and Reactivity

Stability	: The product is stable.
Conditions and Materials to Avoid	: Slightly reactive to reactive with oxidizing agents, combustible materials, metals, alkalis.
Hazardous Decomposition Products	: Not available.

11. Toxicological Information

Toxicity Data

<u>Ingredient Name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
1) Deionized Water	LD50	90000 mg/kg	Oral	Rat
2) Propyl alcohol	LD50	1870 mg/kg	Oral	Rat
	LD50	6800 mg/kg	Oral	Mouse
	LD50	2825 mg/kg	Oral	Rabbit
	LD50	4060 mg/kg	Dermal	Rabbit
	LDLo	5700 mg/kg	Oral	Human Female.

Routes of Entry : Absorbed through skin. Eye contact. Inhalation.

Acute Effects

Inhalation	: Harmful by inhalation.
Ingestion	: Harmful if swallowed.
Skin Contact	: Moderately irritating to the skin.
Eye Contact	: Severely irritating to the eyes.

Chronic Effects

Adverse Effects	: Not available.
Target Organs	: Contains material which causes damage to the following organs: the nervous system, gastrointestinal tract, skin, eyes, central nervous system (CNS), .
Carcinogenic Effects	: Not available.
Mutagenic Effects	: Mutagenic for bacteria and/or yeast. [Propyl alcohol]. Mutagenic for mammalian germ and somatic cells. [Cholesterol]. Mutagenic for bacteria and/or yeast. [Cholesterol].

Other Information

: Not available.
Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

12. Ecological Information

Ecotoxicity Data

<u>Ingredient Name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
1) Deionized Water	Not available.	Not available.	Not available.
2) Propyl alcohol	Fish.	96 hours	3000 to 4000 mg/l

Environmental Hazards : Practically non-toxic to aquatic organisms.

13. Disposal Consideration

Waste Handling and Disposal : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport Information

Canada

Shipping Description : n-Propanol, 3, 1274, III

15. Regulatory Information

US Regulations

Haz-Com Standard : CLASS: Irritating substance.
CLASS: Target organ effects.
CLASS: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).

EPA : TSCA 8(b) inventory: Deionized Water; Propyl alcohol
SARA 302/304/311/312 hazardous chemicals: Propyl alcohol
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Propyl alcohol: fire, immediate health hazard, delayed health hazard

State : Pennsylvania RTK: Propyl alcohol: (generic environmental hazard)
Massachusetts RTK: Propyl alcohol
New Jersey: Propyl alcohol

Canadian Regulations

WHMIS : Not a WHMIS controlled material.

CEPA : CEPA DSL: Deionized Water; Propyl alcohol

Provincial : No products were found.

16. Other Information

Validated by baldwinron on 7/2/2001.

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Date of Printing : 8/15/2001.

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.