



# MATERIAL SAFETY DATA SHEET FOR IMMULITE VITAMIN B12 LKVB1,5

## 1 PRODUCT IDENTIFICATION

TRADE NAME: IMMULITE Vitamin B12 In-vitro Diagnostic Test Kit

PRODUCT CODE: LKVB1,5

MANUFACTURER/SUPPLIER: Diagnostic Products Corporation 5700 W. 96<sup>th</sup> St., Los Angeles CA 90045  
Emergency Phone Number: (800) 372-1782 Phone Number: (800) 372-1782

Fax Number: (310) 645-9999

PRODUCT COMPONENTS & CATALOG NUMBERS: Vitamin B12 Test Units LVB1; Reagent LVBA & LVBB; Adjustors LVBL & LVBH;  
Borate-KCN Buffer Solution LBCN; Dithiothreitol Solution LDTT

PRODUCT FORMAL NAME Diagnostic Reagent

PRODUCT CHEMICAL NAME: Aqueous Solution

## 2 HAZARDOUS INGREDIENTS

Kit Component(s): LVBA & LVBB, LVBL & LVBH, LBCN

| Hazardous Component                                                                    | Percent    | CAS Number | EEC Classification | Symbol | Index # |
|----------------------------------------------------------------------------------------|------------|------------|--------------------|--------|---------|
| LVBA & LVBB, LBCN<br>Sodium Azide (NaN <sub>3</sub> )                                  | <0.1% w/w  | 26628-22-8 | --                 | --     | --      |
| LVBA, LVBL & LVBH<br>Human Serum                                                       | --         | --         | --                 | --     | --      |
| LBCN<br>Potassium Cyanide (KCN)                                                        | <0.01% w/w | 151-50-8   | --                 | --     | --      |
| LDTT<br>Dithiothreitol (C <sub>4</sub> H <sub>10</sub> O <sub>2</sub> S <sub>2</sub> ) | <5.5% w/w  | 3483-12-3  | --                 | --     | --      |

## 3 HAZARD IDENTIFICATION

Sodium Azide is a toxic substance. Avoid contact with components, which contain sodium azide, and do not ingest. An accumulation of sodium azide may result in a reaction with lead or copper plumbing to form an explosive metal azide complex. If drain disposed, dilute and flush with a copious amount of running water to prevent azide build-up. Dangerous when in contact with acid.

Human Serum (or its components) used in the manufacture of components was found non-reactive for HIV-1 antibody, non-reactive for HbsAg, and non-reactive for HCV when tested with licensed reagents. However, no known test method can offer absolute assurance that products derived from human serum will not be infectious. **Handle as if capable of transmitting disease.**

Potassium Cyanide is a corrosive substance. May be fatal if swallowed, inhaled or absorbed through the skin. Contact with acids may liberate poisonous gas. May cause burns to skin, eyes and respiratory tract. Affects blood, cardiovascular system, central nervous system and thyroid.

Dithiothreitol is harmful if swallowed or inhaled and may be harmful if absorbed through the skin. It causes irritation to skin, eyes and respiratory tract. It may affect the central nervous system.

## 4 FIRST AID MEASURES

**EYE CONTACT:** Flush with copious amounts of fresh water for at least 15 minutes.

**SKIN CONTACT:** Wash well with mild soap and copious amounts of fresh water. Remove any contaminated clothing. Flush skin surface with additional water.

**INGESTION:** Flush mouth with copious amounts of water. Do not swallow rinse water. If LDTT is ingested, give large amounts of water to drink.

**INHALATION:** Remove victim to fresh air. If breathing is labored, administer oxygen as needed. If victim is not breathing, administer artificial respiration or CPR.

**If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment.**

## 5 FIRE EXTINGUISHING MEASURES

Use extinguishing media appropriate to surrounding fire. No special equipment or procedures are required.

## 6 ACCIDENTAL RELEASE MEASURES

Absorb spills of reagents and patient samples with absorbent paper, taking care not to spread the material. Clean spill area with a freshly made 0.5% sodium hypochlorite (bleach) solution. Discard all materials used to absorb spill and disinfect area into biohazard waste collection for proper disposal.



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## 7 HANDLING AND STORAGE

**HANDLING:** Do not eat, drink, smoke or apply cosmetics in laboratory areas. Do not pipet patient samples or reagents by mouth. Avoid splashing or aerosol formation. Use all reagents in accordance with the relevant package insert. Avoid high temperatures and keep from freezing during transport.

**STORAGE:** Store all reagents as directed in the relevant package insert.

## 8 EXPOSURE CONTROL/PERSONAL PROTECTION

Wear appropriate personal protective equipment when working with reagents or patient specimens, including lab coats, disposable gloves and eye protection. Avoid hand/mouth contact. Wash hands as soon as possible after handling reagents or patient specimens.

### Control Parameters of Hazardous Ingredients:

Sodium Azide: CAS # 26628-22-8, RTECS # VY805000, TLV-Ceiling=0.3mg/m, NIOSH (the concentration of sodium azide in this product is well below the TLV shown above). Threshold limit value 1.0 ppm, TDLo (oral) 710mcg/kg, female 3mg/kg, LDLo (oral) 29mg male, LDLo (oral) 786 mg female.

Potassium Cyanide: CAS #151-50-8, RTECS #1003448IM, OSHA Permissible Exposure limit (PEL): 5 mg/m<sup>3</sup> skin (TWA) (as CN); ACGIH Threshold Limit Value (TLV): 5 mg/m<sup>3</sup> (STEL) Ceiling, skin, as CN, Oral rat LD50: 5mg/kg.

Dithiothreitol: CAS #3483-12-3, RTECS# EK261000, LD50-intramuscular, mouse = 108 MG/KG. NIOSH: none listed.

## 9 PHYSICAL & CHEMICAL PROPERTIES

|                         |                       |                               |                     |
|-------------------------|-----------------------|-------------------------------|---------------------|
| Physical State: Liquid  | Color: Clear          | Odor: None                    | pH: N/A             |
| Boiling Point: 100°C    | Melting Point: 0°C    | Flash Point: N/A              | Inflammability: N/A |
| Autoinflammability: N/A | Explosiveness: N/A    | Oxidizing Properties: N/A     |                     |
| Vapor Pressure: N/A     | Relative Density: N/A | Solubility in water: Complete |                     |

## 10 STABILITY & REACTIVITY

The reagents in the kit are stable under the storage conditions described in the package insert. Hazardous decomposition will not occur. There are no known strong incompatibilities.

## 11 TOXICOLOGICAL INFORMATION

Not applicable

## 12 ECOLOGICAL INFORMATION

Not applicable

## 13 DISPOSAL

Dispose in accordance with applicable laws. If drain disposed, dilute and flush with a copious amount of running water to prevent azide build-up (See Section 3).

## 14 TRANSPORT INFORMATION

Proper Shipping Name: In vitro diagnostic reagents  
Hazard Class: None  
Identification Number: None

## 15 REGULATORY INFORMATION

Pursuant to U.S. OSHA regulations and the EEC Directive Number 88/379, the only hazardous ingredients associated with this product are those listed in Section 2 above.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The user should determine the suitability of this information for the intended use of the product and adopt appropriate safety precautions. DPC shall not be held liable for any damage resulting from handling or from contact with the above product. Contact DPC for further information.

Date MSDS first initiated: December 2<sup>nd</sup> 1994  
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Prepared By: M. Romero

Sections Revised: 2, 3, 4, 8  
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