

**BIOTECH
MATERIAL SAFETY DATA SHEET**

SECTION 1: PRODUCT AND MANUFACTURER'S IDENTIFICATION

Manufacturer: BIOTech Products LLC
1578 Sussex Turnpike
Building 4
Randolph, NJ 07869

Information Phone: 973-598-0044
Emergency Phone: 973-978-5858

Product Name: BIOchem C-3 LD100
ProductCode: C-3 LD100 Liquid
CAS #: 117002-37-6
Chemical Family: Organo - Titanates – Quat

SECTION 2: COMPOSITION/INFORMATION ON COMPONENTS

Chemical Name: Titanate (3-), [*P,P*- bis(2-ethylhexyl) diphosphato (2-)-κO^{''}] bis[*P,P*-bis (2-ethylhexyl) diphosphato (2-)-κO^{''}, κO^{''''}] [2,2-bis[(2-propenyloxy) methyl]-1-butanolato-κO]-, trihydrogen, compd. with N-[3-(dimethylamino) propyl] -2-methyl -2- propenamide (1:3) CAS #117002-37-6 100%

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: Red-brown liquid with an alcoholic odor. It presents little or no immediate significant hazard if spilled. It presents no unusual hazard if involved in a fire, however, upon thermal decomposition it may emit toxic fumes.

Breathing: This substance has the potential of being a respiratory tract irritant.

Skin Contact: Prolonged or repeated skin contact may cause skin irritation.

Eye Contact: Contact with eyes will cause eye irritation.

Swallowing: May be harmful if swallowed.

Inhalation: There is a potential for irritation of the respiratory tract.

Long Term Health Effects: Not known.

Conditions Aggravated by Exposure: Not known.

Original MSDS: JULY 2009

SECTION 4: FIRST AID MEASURES

Skin: Wash with soap and water. Get medical attention if irritation develops or persists.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids apart. Get immediate medical attention if irritation or other symptoms develop.

Swallowing: Get immediate medical attention. Never give anything by mouth to an unconscious person.

Breathing: If exposed to excessive levels of vapors or mists, remove to fresh air and get immediate medical attention if cough or other symptoms develop.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point160 F 71 C

MethodTCC

Lower Explosive Point Not determined

Upper Explosive Point Not determined

Auto-Ignition Temperature . . . Not determined

Extinguishing Media Foam, CO₂, Dry Chemical, Water spray

Firefighting Procedure: Evacuate area and fight fire from a safe distance. Wear self-contained breathing apparatus pressure-demand (MHSA/NIOSH approved or equivalent) and full protective gear.

Special Firefighting Procedure: As with any fire, wear self-contained breathing apparatus pressure-demand (MHSA/NIOSH approved or equivalent) and full protective gear. Use caution when using water as frothing may occur and thereby increasing fire intensity.

Unusual Fire and explosion Hazards . . . May emit toxic fumes upon thermal decomposition.

Sensitivity to Explosion by Mechanical ImpactNone

Sensitivity to Explosion by Static Discharge Potential exists

Conditions of FlammabilityMaterial will burn - avoid sources of ignition and also avoid temperatures that are within range of the flash point.

SECTION 6: ACCIDENTAL RELEASE MEASURES

General.This material should be prevented from contaminating soil for from sewerage and drainage systems and bodies of water. Isolate hazard/spill area. Keep unnecessary and unprotected personnel from enter area.

Small Spill Absorb spill with inert material, then place in a chemical waste container.

Large SpillShut off leak, if safe to do so. Clean up spills immediately, observing precautions in

Protective Equipment Section. Contain spilled liquid with sand or earth.

Retain all contaminated water and soil for removal and treatment.

SECTION 7: HANDLING AND STORAGE

Handling. . . . Although this material does not present a significant skin or eye hazard, skin and eye contact should be prevented as good industrial hygiene practice. Wearing of protective gloves and eye protection is recommended. Always establish the practice of washing arms and hands, as with any chemical, after handling.

Storage. . . . Store in a cool, dry and well ventilated area. Avoid contact or exposure to incompatible substances. Also avoid those areas where there are ignition sources.

SECTION 8: EXPOSURE CONTROLS - PERSONAL PROTECTION

Exposure Levels:

Component	OSHA		ACGIH	
	TWA	STEL	TWA	STEL
117002-37-6	Not Established		Not Established	

Engineering Controls: Source(s) of fine spray, mist or vapor should be controlled with local exhaust ventilation.

Respiratory Protection: A NIOSH/MHSA approved air purifying respirator may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, if established. Consult with respirator's manufacturer to determine the appropriate type of equipment for a given application. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Eye/Face Protection: Always use safety glasses. Where contact with the eyes is likely, use chemical goggles. Use a face shield as needed.

Skin Protection: Wear impervious gloves and chemical protective clothing, including impervious sleevelets, overalls, aprons, or boots as needed to prevent contact with the skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

AppearanceRed-Brown liquid
OdorAlcoholic
Boiling Range 220°F IBP
Specific Gravity (relative to water)1.05 @ 77°F
Vapor Density (relative to air)Heavier than air
Vapor Pressure (mm Hg)Not established
pH 8.5
Solubility in Water Yes
Freezing/Melting Point Not established
Octanol/Water Partition CoefficientNot established
Odor Threshold Not established
Flash Point (TCC) 160°F 71°C
Auto-Ignition Temperature Not established
Explosive PropertiesNot established
Oxidizing PropertiesNone
Viscosity @ 77°5800 cps
Evaporation Rate (relative to n-butyl acetate). . . .Slower

SECTION 10: STABILITY AND REACTIVITY

Stable Yes

Strong OxidizerNo

Hazardous PolymerizationMay occur at elevated temperatures.

IncompatibilityOxidizers, acids, alkaline materials, free radical initiators, ultraviolet light.

Conditions to AvoidKeep from contact with oxidizers, acids, alkaline materials. Avoid sources of ignition, UV light and elevated temperatures.

Hazardous Decomposition Products Oxides of carbon and phosphorous.

SECTION 11: TOXICOLOGICAL INFORMATION

Base Component:

Oral LD50>2.5g/kg -- <5.0g/kg

Primary Dermal Irritation. 0.6

Non-mutagenic - Ames test with S-9 activation

Amine QUAT

Primary Skin - 1.1-slightly irritating.

Irritation cleared by 72 hours.

DMPMA Component:

Oral LD50. 3334 mg/kg (Rat)

Acute Dermal (LD50) 2355 mg/kg (Rabbit)

Draize Eye Highly irritating (Rabbit)

Draize Skin Non-Irritant, non-sensitizing (Rabbit)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological and Chemical Fate InformationNot determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste DisposalDispose of in accordance with all federal, state and local regulations.

Container DisposalDispose of in accordance with all federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping NameNot regulated
Hazard Class
Packing Group
UN/NA No.
DOT Labels
Subsidiary LabelNone
DOT Placard(BULK)

IMO Shipping NameNot regulated
Hazard Class
Packing Group
UN No.
IMO Labels
Subsidiary Label None

IATA Shipping NameNot regulated
Hazard Class
Packing Group
UN No.
IATA Labels
Subsidiary Label None

SECTION 15: REGULATORY INFORMATION

SARA 311/312 Chronic Health Hazard Not determined
SARA 311/312 Acute Health Hazard Irritant
SARA 311/312 Fire Hazard Combustible Liquid
SARA 311/312 Sudden Pressure No
SARA 311/312 Reactivity Hazard No

SECTION 15: REGULATORY INFORMATION (continued)

Section 302 - Extremely Hazardous Ingredient(s)None

CERCLA Hazardous Substance(s) None

Section 313 Toxic Chemical(s) None

NJ Environmental Hazardous Substances List Not Listed

Other States ListingsNot listed to our knowledge.

California Proposition 65 Ingredients None

Reported in TSCA InventoryYES

TSCA RulingsNone to our knowledge.

Reported in EEC Inventory No

Reported in Canada Inventory No

SECTION 16: OTHER INFORMATION

HMIS Hazard Rating Health = 2 ; Fire = 2 ; Reactivity = 1 ;

NFPA Hazard Rating Health = 2 ; Fire = 2 ; Reactivity = 1 ;

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