



New England Biolabs
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MATERIAL SAFETY DATA SHEET

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REVISION DATE: 2/05

dNTP's
#N0447

SECTION 1 - PRODUCT

Product Name: Deoxynucleotide Solution Mix

SECTION 2- CHEMICAL INFORMATION

1. 2'-deoxycytidine-5' Triphosphate	Cas.	None	SARA 313: NO
2. 2'-deoxythymidine-5' Triphosphate	Cas.	None	SARA 313: NO
3. 2'-deoxyadenosine-5' Triphosphate	Cas.	None	SARA 313: NO
4. 2'-deoxyguanosine-5' Triphosphate	Cas.	None	SARA 313: NO

SECTION 3-HAZARDOUS IDENTIFICATION

HMIS Rating
Health: 0
Flammability: 0
Reactivity: 1

NFPA Rating
Health: 0
Flammability: 0
Reactivity: 1

SECTION 4 -FIRST AID MEASURES

ORAL EXPOSURE: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE: In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

SECTION 5–FIRE FIGHTING MEASURES

Extinguishing Media: Water spray.
Carbon Dioxide, dry chemical powder or appropriate foam.

Special Firefighting Procedures: Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosions Hazard (s):
Emits toxic fumes under fire conditions.

Flash point: N/A

Flammability: N/A

Autoignition Temp: N/A

SECTION 6 –ACCIDENTAL RELEASE MEASURES

PROCEDURE(S) OF PERSONAL PRECAUTION(S):

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of vapors.

METHODS FOR CLEANING UP:

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

SECTION 7– HANDLING AND STORAGE

Flush spill area with copious amounts of water.

Handling:

User Exposure: Avoid Inhalation.

Avoid contact with eyes, skin and clothing.

Avoid prolonged or repeated exposure.

Storage: –° 20C

Keep tightly closed.

SECTION 8 – EXPOSURE CONTROLS/PPE

Engineering Controls: Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment:

Respiratory

Hand:

Compatible chemical-resistant gloves.

Eye:

Chemical safety goggles.

General Hygiene Measures:

Wash hands thoroughly after handling.

Wash contaminated clothing before use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Physical State: Liquid

Property

Value

N/A = not available

Molecular Weight:	NA
pH:	NA
BP/BP Range:	NA
MP/MP Range:	NA
Freezing Point:	NA
Vapor Pressure:	NA
Vapor Density:	NA
Saturated Vapor:	NA
SG/Density:	NA
Bulk Density:	NA
Odor Threshold:	NA
Volatile %:	NA
Voc Content:	NA
Water Content:	NA
Solvent Content:	NA
Evaporation Rate:	NA
Viscosity:	NA
Surface Tension:	NA
Partition Coefficient:	NA
Decomposition Temp:	NA
Flash Point:	NA
Explosion Limits:	NA
Flammability:	NA
Autoignition Temp:	NA
Refraction Index:	NA
Optical Rotation:	NA
Miscellaneous Data:	NA
Solubility in Water:	NA

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to avoid: Strong oxidizing agents

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products:

Hazardous decomposition products: Carbon monoxide, Carbon dioxide, Nitrogen oxides

SECTION 11- TOXICOLOGICAL INFORMATION

Route of Exposure:

Skin Absorption: May be harmful if absorbed through the skin.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled.

Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

Sign and Symptoms of Exposure:

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

SECTION 12- ECOLOGICAL INFORMATION

Data Not yet Available

SECTION 13- DISPOSAL CONSIDERATIONS

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state and local environmental regulations.

SECTION 14- TRANSPORT INFORMATION

DOT

Proper Shipping Name: None

Non-hazardous for Transport: This substance is considered to be non-hazardous for transport

IATA

Non-Hazardous for Transport: Non-hazardous for air transport.

SECTION 15- REGULATORY INFORMATION

United States Regulatory Information:

Sara Listed: No

Canada Regulatory Information

WHMIS Classification: This product has been classification in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

DSL: No

NDSL: No

SECTION 16- OTHER INFORMATION

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct but does not purport to be allinclusive and shall be used only as a guide.

New England Biolabs shall not be held liable for any damage resulting from handling or from contact with the above product.