

dNTP Mix - 10 mM Solution

Cat#: orb533048 (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifiers

Product name : dNTP Mix - 10 mM Solution

Product Number : orb533048

Brand : Biorbyt

supplier : Biorbyt Ltd, 5 Orwell Furlong, Cowley Road, Cambridge, Cambridgeshire, CB4 0WY, United Kingdom.

Emergency Phone # : +44 (0)1223 859-353

SECTION 2: Hazards identification

This substance is not classified as dangerous according to Regulation (EC) No. 1272/2008 (EU-GHS/CLP).

SECTION 3: Composition/information on ingredients

Synonyms:

Formula:

dATP: C₁₀H₁₆N₅O₁₂P₃ (free acid)

dCTP: C₉H₁₆N₃O₁₃P₃ (free acid)

dGTP: C₁₀H₁₆N₅O₁₃P₃ (free acid)

dTTP: C₁₀H₁₇N₂O₁₄P₃ (free acid)

Molecular Weight:

dATP: 491.18 g/mol (free acid)

dCTP: 467.15 g/mol (free acid)

dGTP: 507.18 g/mol (free acid)

dTTP: 482.17 g/mol (free acid)

SECTION 4: First aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

SECTION 5: Firefighting measures**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures**Personal precautions**

Avoid dust formation.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage**Handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: store at -20 °C

SECTION 8: Exposure controls/personal protection**Personal protective equipment****Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

SECTION 9: Physical and chemical properties

Appearance

Form: clear aqueous solution

Safety data

pH: 8.5 ± 0.2 (22 °C)

Melting point: no data available

Boiling point: no data available

Flash point: no data available

Ignition temperature: no data available

Lower explosion limit: no data available

Upper explosion limit: no data available

Water solubility: no data available

SECTION 10: Stability and reactivity

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x), Oxides of phosphorus, Lithium oxides.

SECTION 11: Toxicological information

Acute toxicity

no data available

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Signs and Symptoms of Exposure

Dermatitis

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

Target Organs: Liver, Kidney

SECTION 12: Ecological information

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

no data available

Further information on ecology

no data available

SECTION 13: Disposal considerations

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

ADR/RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Labelling according to EC Directives

The product does not need to be labelled in accordance with EC directives or respective national laws.