

**MATERIAL SAFETY DATA SHEET****VIVANTIS TECHNOLOGIES SDN BHD  
REVONGEN CORPORATION CENTER**

Document No.: MSDSrev05\_dNTPset

Date prepared: 10<sup>th</sup> January 2023Reviewed: 10<sup>th</sup> January 2023**SECTION 1: CHEMICAL IDENTIFICATION**Catalogue Number: NP2401; NP2401-S; NP2402; NP2402-S; NP2403; NP2403-S;  
NP2404; NP2404-S; NP2405; NP2405-S; NP2406; NP2406-S;  
NP2407; NP2408Product Name: 100mM dATP; 100mM dCTP; 100mM dGTP; 100mM dTTP;  
100mM dUTP; 100mM dNTPs Set with different packaging

Intended Use:

For research use only. Not for use in diagnostic procedures.

**Company Headquarters:**Vivantis Technologies Sdn Bhd  
Revongen Corporation Center  
Level 17, Top Glove Tower,  
No. 16, Persiaran Setia Dagang,  
Setia Alam, Seksyen U13, 40170 Shah Alam,  
Selangor Darul Ehsan, Malaysia.

Tel: +6 03 3359 1166

Fax: +6 03 3358 0303

Email: info@vivanttechnologies.com

Website: www.vivanttechnologies.com

**Company Manufacturing:**Vivantis Technologies Sdn Bhd  
Production Lab  
Level 1, Enterprise 2,  
Technology Park Malaysia,  
Lebuhraya Puchong-Sg. Besi,  
57000 Bukit Jalil,  
Kuala Lumpur, Malaysia.Pairing Nature with  
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**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENT**

100mM dNTPs Set

Chemical Name	CAS No.
dATP	74299-50-6
dCTP	3770-58-9
dGTP	93919-41-6
dTTP	3624-46-2

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Ingredients indicated above do not present a health or environmental hazard within the meaning of Council Directive 67/548/EEC, or their concentrations do not exceed the limits specified in Council Directive 1999/45/EC, and in Commission Directive 2001/58/EC.

**SECTION 3: HAZARDS IDENTIFICATION**

**GHS Classification**

The preparation is not classified as dangerous according to Directive 1999/45/EC or Directive 67/548/EC and is not labeled with danger symbols or indications of danger.

**Hazards deriving from physical-chemical properties:**

The data available do not support any physical or chemical hazard.

**Human Health Hazards**

Inappropriate handling may cause formation of aerosols.

Inhalation – May cause allergic type reactions in sensitized individuals

Skin Contact – May cause minor irritation

**Environmental Hazards**

The data available do not supply any environmental hazard.

**Label Elements**

The product is not subject to identification regulations according to directives on hazardous materials.

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## **SECTION 4: FIRST-AID MEASURES**

In case of contact with eyes, immediately wash out opened eyes with plenty of water for several minutes. Consult a doctor in event of any complaints.

In case of contact with skin, immediately wash with soap and copious amounts of water. If symptoms of irritation after prolonged exposure occur, consult a doctor.

If inhaled, remove to fresh air. If symptoms of irritation or respiratory allergy occur, consult a doctor.

If swallowed, wash out mouth with water provided the person is conscious. Consult a doctor in event of any complaints.

## **SECTION 5: FIRE FIGHTING MEASURES**

### Extinguishing Media

Water spray, carbon dioxide, dry chemical powder or appropriate foam. Fight larger fires with water spray or alcohol resistant foam.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### Special exposure hazards from decomposition products:

Not thoroughly investigated.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### Personal Precautions

Wear appropriate gloves, safety glasses to clean small releases/spillage. In case of Vapour/aerosol formation, wear suitable respiratory protection means. Ventilate the area.

### Measures for Cleaning / Collecting

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

No special measures required for environmental precautions.

No dangerous substances are released.

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## **SECTION 7: HANDLING AND STORAGE**

### Handling

Handle in accordance with good industrial hygiene and safety practice.

Use appropriate personal protection measures. Avoid any contact with the liquid. Avoid formation of aerosols. Ventilate area.

### Storage

Keep tightly closed in a dry and well-ventilated place. Store at -20°C.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that need to be monitored at the workplace.

### Hygiene Measures

General practice, wash hands and skin thoroughly after handling. Remove and wash contaminated clothing.

### Engineering controls

No specific requirements relating to the preparation.

### Personal protection

Respiratory protection:

Use in well ventilated areas. No special measures required.

Skin Protection:

The usual precautionary measures accepted in research laboratories; no specific requirements.

Hand protection:

Wear rubber gloves; no special requirements to rubber. Protective lab coat and chemical-resistant gloves

Eye Protection:

No need to wear glasses (goggles) when ordinary operations with the preparation. Safety glasses are recommended during certain operations when aerosol formation is possible.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance:	Liquid
Odor:	None or odorless
Color:	Clear or colorless
pH at 25°C:	6 - 8
Boiling Point:	No information available
Melting Point:	No information available
Flash Point:	No information available
Flammability:	The preparation is not flammable / self-igniting
Explosive properties:	The preparation does not possess explosive properties
Oxidizing properties:	No information available
Vapour pressure:	No information available
Relative density at 20°C:	No information available
Solubility in/miscibility with water:	Soluble in water
Fat solubility:	No information available
Vapour density:	No information available
Evaporation rate:	No information available
Conductivity:	No information available
Viscosity:	No information available

## SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable under storage conditions. Storage at room temperature may result in lowering of the specific activity, but not result in any hazardous reactions.
Conditions to avoid:	No conditions which may cause dangerous reactions. Incompatible materials, ignition sources, heat.
Materials to avoid:	No materials which may cause dangerous reactions.
Possibility of hazardous reactions:	No dangerous reactions known.
Hazardous Decomposition Products:	No dangerous decomposition products known.
Hazardous Polymerization:	Will not occur

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**SECTION 11: TOXICOLOGICAL INFORMATION**

Acute and chronic affects based on routes of exposure

- Eye contact: Prolonged eye contact may cause minor irritation.
- Skin contact: Prolonged skin contact may cause minor irritation.
- Ingestion: Repeated ingestion or excessive dosage may cause irritation of the gastrointestinal tract.
- Inhalation: Inhalation of enzyme aerosols may cause allergic type reactions in sensitized individuals.

When used and handled according to specifications, the product does not have any harmful effects.

Information on toxicological effects

Symptoms: No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Skin corrosion/irritation: Mild
- Serious eye damage/eye irritation: Mild
- Irritation: Mild
- Corrosivity: Mild
- Skin sensitization: No information available
- Respiratory sensitization: No information available
- Germ cell mutagenicity: No information available
- Carcinogenicity: No information available
- Reproductive toxicity: No information available
- Developmental toxicity: No information available
- Teratogenicity: No information available
- STOT – single exposure: No information available
- STOT – repeated exposure: No information available
- Chronic toxicity: No information available
- Subchronic toxicity: No information available
- Target organ effects: Kidneys, eyes, skin, respiratory system
- Neurological effects: No information available
- Other adverse effects: No information available
- Aspiration hazard: No information available

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## **SECTION 12: ECOLOGICAL INFORMATION**

### Ecotoxicity:

The preparation is considered not dangerous to the environment with respect to mobility, persistence and degradability, bioaccumulation, aquatic toxicity and other data relating to ecotoxicity.

### Persistence and degradability:

The preparation is readily biodegradable.

### Bioaccumulative potential:

It is considered that the preparation does not accumulate in biota and does not pass through food chain.

### Other adverse effects:

Not applicable.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

No special disposal methods required, except to be in accordance with federal, state and local environmental regulations

## **SECTION 14: TRANSPORT INFORMATION**

This product is not dangerous, and no special precautions are needed according to ADR/RID (cross border), IMDG and IATA/ICAO.

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## **SECTION 15: REGULATORY INFORMATION**

### **International Inventories**

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

### **U.S. Federal Regulations**

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### **United States Regulatory Information:**

Sara listed: No

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### **Canada Regulatory Information:**

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

DSL: No

NDSL: No

#### **EU Guidelines:**

The preparation is not dangerous within the meaning of Directives 67/548/EC, 1999/45/EC, and 88/379/ECC, and is not labeled with danger symbols or indications of danger.

#### **Export and Import of Dangerous Chemicals (Regulation (EC) No 689/2008) Information**

This substance is not listed in the Annex I of Regulation (EC) No 689/2008.

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## **SECTION 16: OTHER INFORMATION**

The information contained in this MSDS relates only to the material(s) designed and does not relate to use(s) in combination with any other material, process(es) and /or chemical reaction(s). Vivantis Technologies Sdn. Bhd. provides this information in good faith, from sources believed to be accurate; however, Vivantis assumes no liability for its accuracy or completeness, and thus shall not be held liable for any damage resulting from handling or from contact with the above product.

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