

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## TNP-GppNHp

(TNP-GMPPNP)

2',3'-O-Trinitrophenyl-guanosine-5'-[( $\beta,\gamma$ )-imido]triphosphate, Triethylammonium salt

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name: TNP-GppNHp  
Catalog Number: NU-218S;NU-218L  
Supplier: Jena Bioscience GmbH  
Loebstedter Strasse 71  
07749 Jena, Germany  
Telephone: +49 - 3641 - 62 85 000  
Fax: +49 - 3641 - 62 85 100  
e-Mail: [info@jenabioscience.com](mailto:info@jenabioscience.com)  
WWW: <http://www.jenabioscience.com>

### 2. HAZARDS IDENTIFICATION

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:  
Formula:  $C_{16}H_{18}N_9O_{19}P_3$   
Molecular Weight: 733.28 g/mol  
CAS-No.:  
EC number:  
Classification: -  
Concentration:

### 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.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

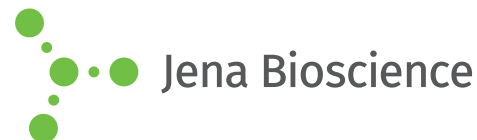
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## TNP-GppNHp

(TNP-GMPPNP)

2',3'-O-Trinitrophenyl-guanosine-5'-[[ $\beta,\gamma$ ]-imido]triphosphate, Triethylammonium salt

## 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.

## 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

## 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form: orange lyophilised solid

### Safety data

pH:  
Melting point: no data available  
Boiling point: no data available

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## TNP-GppNHp

(TNP-GMPPNP)

2',3'-O-Trinitrophenyl-guanosine-5'-[[ $\beta,\gamma$ ]-imido]triphosphate, Triethylammonium salt

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

## 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<sub>x</sub>), Oxides of phosphorus, Lithium oxides.

## 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

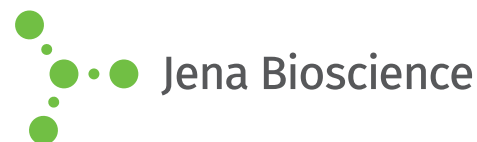
Inhalation:	May be harmful if inhaled. May cause respiratory tract irritation.
Skin:	May be harmful if absorbed through skin. May cause skin irritation.
Eyes:	May cause eye irritation.
Ingestion:	May be harmful if swallowed.
Target Organs:	Liver, Kidney

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## TNP-GppNHp

(TNP-GMPPNP)

2',3'-O-Trinitrophenyl-guanosine-5'-[[ $\beta,\gamma$ ]-imido]triphosphate, Triethylammonium salt

no data available

### Ecotoxicity effects

no data available

### Further information on ecology

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Observe all federal, state, and local environmental regulations.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### ADR/RID

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

## 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.

## 16. OTHER INFORMATION

### Further information

© 2017 Jena Bioscience GmbH

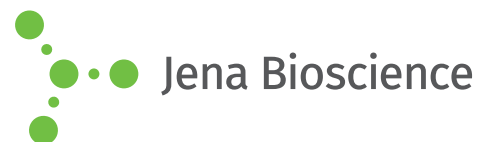
This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Users should make independent decisions regarding completeness of the information based on all sources available.

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 information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

Jena Bioscience GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See our website for our terms and conditions of sales.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## TNP-GppNHp

(TNP-GMPPNP)

2',3'-O-Trinitrophenyl-guanosine-5'-[( $\beta,\gamma$ )-imido]triphosphate, Triethylammonium salt