

# Safety data sheet

According to 1907/2006/EC, Article 31

Print date: 27.02.2019

Updated: 27.02.2019

Version: 3



## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

– Trade name: Hypernova DNA Polymerase

– Article number: RP232, RP235

– Components: Hypernova DNA Polymerase (2 U/μl), 10x Hypernova Reaction Buffer, 10x Shark Reaction Buffer, 50 mM MgCl<sub>2</sub>

### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

*No data available.*

– Application of the substance / the preparation: *Laboratory reagents.*

### 1.3 Details of the supplier of the safety data sheet

– Manufacturer/supplier:

**BLIRT S.A.**

*Trzy Lipy 3/1.38*

*80-172 Gdańsk*

*Poland*

*orders@blirt.eu*

*Tel. +48 58 739 61 50*

### 1.4 Emergency telephone number:

*+48 58 739 61 50 (Inside normal business hours)*

*112*

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## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

– Trade name: Hypernova DNA Polymerase, 50 mM MgCl<sub>2</sub>

### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

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– Application of the substance / the preparation: *Laboratory reagents.*

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## 2 Hazards identification

### 2.1 Classification of the substance or mixture

– Classification according to Regulation (EC) No 1272/2008

*Not a hazardous mixture according to Regulation (EC) No. 1272/2008.*

### 2.2 Label elements

– Labelling according to Regulation (EC) No 1272/2008:

*The mixture is not classified and labelled according to the CLP regulation.*

– Hazard pictograms: *Not applicable.*

– Signal word: *Not applicable.*

– Hazard statements: *Not applicable.*

– Precautionary statement(s): *Not applicable.*

### 2.3 Other hazards

*Not applicable.*

### 3 Composition/information on ingredients

- 3.2 Chemical characterization:** *Mixture.*  
– **Other information:** *Not significant.*

### 4 First aid measures

- 4.1 Description of first aid measures**  
– **General information:** *No special measures required.*  
– **After inhalation:** *Supply fresh air. Consult doctor in case of complaints.*  
– **After skin contact:** *Wash with plenty of water. If skin irritation occurs, consult a doctor.*  
– **After eye contact:** *Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*  
– **After swallowing:** *If symptoms persist consult doctor.*
- 4.2 Most important symptoms and effects, both acute and delayed:**  
*No further relevant information available.*
- 4.3 Indication of any immediate medical attention and special treatment needed:**  
*No further relevant information available.*

### 5 Firefighting measures

- 5.1 Extinguishing media**  
– **Suitable extinguishing agents:** *Water, CO<sub>2</sub>, foam, powder.*
- 5.2 Special hazards arising from the substance or mixture**  
– **Special hazard arising from the mixture:** *No further relevant information available.*
- 5.3 Advise for firefighters**  
– **Protective equipment:** *Wear self-contained respiratory protective device.*
- Additional information**  
*Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.*

### 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** *Avoid mixture contact.*
- 6.2 Environmental precautions:** *Do not allow to enter sewers/surface or ground water.*
- 6.3 Methods and material for containment and cleaning up:** *Pick up mechanically. Clean up affected area. Dispose of the material collected according to regulations.*
- 6.4 Reference to other sections**  
*See section 7 for information on safe handling.*  
*See section 8 for information on personal equipment.*  
*See section 13 for disposal information.*

## 7 Handling and storage

- 7.1 **Precautions for safe handling:** *No special precautions are necessary if used correctly.*
- 7.2 **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
  - **Information about storage in one common storage facility:** *Not required.*
  - **Further information about storage conditions:** *Keep container sealed.*
  - **Recommended storage temperature:** **-20°C**
  - **Storage class:** *10-13*
- 7.3 **Specific end use(s):** *No further relevant information available.*

## 8 Exposure controls/personal protection

- 8.1 **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** *Not required.*
  - **Additional information:** *The lists valid during the making were used as basis.*
- 8.2 **Exposure controls**
- **Personal protective equipment:**
    - **General protective and hygienic measures:** *Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.*
    - **Respiratory protection:** *No further relevant information available.*
    - **Protection of hands:**

*Protective gloves – the glove material has to be impermeable and resistant to the product/the substance/the preparation.*

      - *Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation:*
    - **Material of gloves:** *the selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.*
    - **Penetration time of glove material:** *The exact break through time has to be observed.*
    - **For the permanent contact gloves made of the following materials are suitable:** *Nitrile rubber, NBR. Recommended thickness of the material  $\geq 0,11$  mm. Value for the permeation: Level  $\geq 480$  min.*
    - **Eye protection:** *Safety glasses.*
    - **Body protection:** *Protective work clothing. Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.*

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

– Appearance:

Form: *Liquid*

9.2 Other information: *No further relevant information available.*

## 10 Stability and reactivity

10.1 Reactivity: *No data available.*

10.2 Chemical stability: *No data available.*

– Thermal decomposition/conditions to be avoided: *No decomposition if used according to specifications.*

10.3 Possibility of hazardous reaction: *No further relevant information available.*

10.4 Conditions to avoid: *No further relevant information available.*

10.5 Incompatible materials: *No further relevant information available.*

10.6 Hazardous decomposition product: *No further relevant information available.*

## 11 Toxicological information

### 11.1 Information on toxicological effects

– Acute toxicity:

• Oral/Ingestion:  $ATE_{mix} > 2000$  (Hypernova DNA Polymerase)

• Inhalation/Respiratory:  $ATE_{mix} > 20$  (Hypernova DNA Polymerase)

– Primary irritant effect:

• On the skin: *No irritant effect.*

• On the eye: *No irritant effect.*

– Sensitization: *No sensitizing effects known.*

## 12 Ecological information

12.1 Toxicity: *No data available.*

12.2 Persistence and degradability: *No further relevant information available.*

12.3 Bioaccumulative potential: *No further relevant information available.*

12.4 Mobility in soil: *No further relevant information available.*

12.5 Results of PBT and vPvB: *Not applicable.*

12.6 Other adverse effects: *No further relevant information available.*

## 13 Disposal considerations

### 13.1 Waste treatment methods

– Recommendation: *Chemicals must be disposed of in compliance with the respective national regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

- **Uncleaned packaging (Recommendation):** *Disposal must be made according to official regulations.*
- **Recommended cleansing agents:** *Water, if necessary together with cleansing agents.*

## 14 Transport information

### 14.1 UN-Number:

- ADR, ADN, IMDG, IATA: *Not dangerous goods/not applicable.*

### 14.2 UN proper shipping name:

- ADR, ADN, IMDG, IATA: *Not dangerous goods/not applicable.*

### 14.3 Transport hazard class(es):

- ADR, ADN, IMDG, IATA: *Not dangerous goods/not applicable.*
- Class: *Not dangerous goods/not applicable.*

### 14.4 Packing group:

- ADR, IMDG, IATA: *Not dangerous goods/not applicable.*

### 14.5 Environmental hazards:

- Marine pollutant: *No.*

### 14.6 Special precautions for users: *Not applicable.*

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: *Not applicable.*

- **Transport/additional information:** *Not dangerous according to the above specifications.*
- **UN „Model Regulation“:** *Not applicable.*

## 15 Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: *Not applicable*

### 15.2 Chemical safety assessment: *A Chemical Safety Assessment has not been carried out.*

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

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## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

– Trade name: 10x Hypernova Reaction Buffer, 10x Shark Reaction Buffer

– Hazardous components: *Triton X-100*

– CAS number: *9002-93-1 – Triton X-100*

### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

*No data available.*

– Application of the substance / the preparation: *Laboratory reagents.*

### 1.3 Details of the supplier of the safety data sheet

– Manufacturer/supplier:

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## 2 Hazards identification

### 2.1 Classification of the substance or mixture

– Classification according to Regulation (EC) No 1272/2008



*GHS07*

*Eye Irrit. 2 H319 Causes serious eye irritation.*

### 2.2 Label elements

– Labelling according to Regulation (EC) No 1272/2008

*The mixture is classified and labelled according to the CLP regulation.*

– Hazard pictograms



– Signal word: *Warning*

– Hazard-determining components of labeling: *Triton X-100.*

– **Hazard statements:**

*H319 Causes serious eye irritation.*

– **Precautionary statement(s):**

**Prevention:**

**P264:** *Wash hands thoroughly after handling.*

**P280:** *Wear protective gloves/ eye protection/ face protection.*

**Response:**

**P305+P351+P338:** *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

**P337+P313:** *If eye irritation persists get medical advice/attention.*

**2.3 Other hazards**

*Not applicable.*

### 3 Composition/information on ingredients

**3.2 Chemical characterization:** *Mixture.*

**Dangerous ingredients:**

CAS: 9002-93-1	Triton X-100	1-1,5 %
Acute Tox. 4, H302; Eye Dam. 1, H318; Aquatic Chronic 2, H411		

### 4 First aid measures

**4.1 Description of first aid measures**

– **After inhalation:** *Supply fresh air, consult doctor in case of complains.*

– **After skin contact:** *Immediately rinse with water with soap and remove any clothing soiled by the product. If skin irritation continues, consult a doctor.*

– **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*

– **After swallowing:** *Make victim drink water (maximum of 2 drinking glasses). Seek medical treatment.*

**4.2 Most important symptoms and effects, both acute and delayed:**

*No further relevant information available.*

**4.3 Indication of any immediate medical attention and special treatment needed:**

*Eye bathing equipment should be available on the premises.*

### 5 Firefighting measures

**5.1 Extinguishing media**

– **Suitable extinguishing agents:** *Water, CO<sub>2</sub>, foam, powder.*

**5.2 Special hazards arising from the substance or mixture**

*No further relevant information available.*

**5.3 Advise for firefighters**



– **Protective equipment:** *Wear self-contained respiratory protective device. In order to avoid contact with eyes and skin, keep a safety distance and wear suitable protective glasses and clothing.*

**Additional information**

*Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.*

## 6 Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:** *Avoid mixture contact.*

**6.2 Environmental precautions:** *Do not allow to enter sewers/surface or ground water.*

**6.3 Methods and material for containment and cleaning up:** *Pick up mechanically. Clean up affected area. Dispose of material collected according to regulations. Ensure adequate ventilation. Transfer to closable labelled salvage container for disposal by an appropriate method.*

**6.4 Reference to other sections**

*See section 7 for information on safe handling.*

*See section 8 for information on personal equipment.*

*See section 13 for disposal information.*

## 7 Handling and storage

**7.1 Precautions for safe handling:** *Ensure there is sufficient ventilation of the area. Avoid direct contact with the mixture.*

**7.2 Conditions for safe storage, including any incompatibilities**

– **Requirements to be met by storerooms and receptacles:** *Store in cool, well ventilated area.*

– **Information about storage in one common storage facility:** *Not required.*

– **Further information about storage conditions:** *Keep container sealed.*

– **Recommended storage temperature:** **-20°C**

– **Storage class:** *10-13*

**7.3 Specific end use(s):** *No further relevant information available.*

## 8 Exposure controls/personal protection

**8.1 Control parameters**

– **Ingredients with limit values that require monitoring at the workplace:** *Not required.*

– **Additional information:** *The lists valid during the making were used as basis.*

**8.2 Exposure controls**

– **Personal protective equipment:**

• **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with eyes and skin.

• **Respiratory protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Filter P2.

• **Protection of hands:**

Protective gloves – the glove material has to be impermeable and resistant to the product/the substance/the preparation.

– Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation:

• **Material of gloves:** the selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

• **Penetration time of glove material:** The exact break through time has to be observed.

• **For the permanent contact gloves made of the following materials are suitable:** Nitrile rubber, NBR. Recommended thickness of the material  $\geq 0,11$  mm. Value for the permeation: Level  $\geq 480$  min.

• **Eye protection:** Safety glasses.

• **Body protection:** Protective work clothing. Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

– Appearance:

**Form:** Liquid

### 9.2 Other information: No further relevant information available

## 10 Stability and reactivity

10.1 **Reactivity:** Stable under normal conditions.

10.2 **Chemical stability:** Stable under normal conditions.

– **Thermal decomposition/conditions to be avoided:** No decomposition if used as intended.

10.3 **Possibility of hazardous reaction:** No dangerous reactions known.

10.4 **Conditions to avoid:** No further relevant information available.

10.5 **Incompatible materials:** No data available.

10.6 **Hazardous decomposition product:** See chapter 5.

## 11 Toxicological information

### 11.1 Information on toxicological effects

– **Acute toxicity:**

• *Oral/Ingestion:  $ATE_{mix} > 2000$  (10x Hypernova Reaction Buffer, 10x Shark Reaction Buffer)*

– **Primary irritant effect:**

• *On the skin: No irritant effect.*

• *On the eye: Irritant effect.*

– **Sensitization:** *No sensitizing effects known.*

## 12 Ecological information

12.1 **Toxicity:** *No data available.*

12.2 **Persistence and degradability:** *No further relevant information available.*

12.3 **Bioaccumulative potential:** *No further relevant information available.*

12.4 **Mobility in soil:** *No further relevant information available.*

12.5 **Results of PBT and vPvB:** *Not applicable.*

12.5 **Other adverse effects:** *No further relevant information available.*

## 13 Disposal considerations

### 13.1 Waste treatment methods

– **Recommendation:** *Chemicals must be disposed of in compliance with the respective national regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

– **Uncleaned packaging (Recommendation):** *Disposal must be made according to official regulations. Packagings that may not be cleansed are to be disposed of in the same manner as the product.*

– **Recommended cleansing agents:** *Water, if necessary together with cleansing agents.*

## 14 Transport information

### 14.1 UN-Number:

• *ADR, ADN, IMDG, IATA: Not dangerous goods/not applicable.*

### 14.2 UN proper shipping name:

• *ADR, ADN, IMDG, IATA: Not dangerous goods/not applicable.*

### 14.3 Transport hazard class(es):

• *ADR, ADN, IMDG, IATA Not dangerous goods/not applicable.*

• *Class: Not dangerous goods/not applicable.*

### 14.4 Packing group:

• *ADR, IMDG, IATA: Not dangerous goods/not applicable.*

### 14.5 Environmental hazards:

• *Marine pollutant: No.*

**14.6 Special precautions for users:** *Not applicable.*

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** *Not applicable.*

– **Transport/additional information:** *Not dangerous according to the above specifications.*

– **UN „Model Regulation“:** *Not applicable.*

## **15 Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:** *Not applicable.*

**15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

## **16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*