

# Safety data sheet

according to 1907/2006/EC, Article 31

Print date: 21.05.2018

Updated: 21.05.2018

Version: 3



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

### 1.1 Product identifier

– Trade name: EXTRACTME TOTAL RNA KIT

– Article number: EM09.1/EM11.1

– Components: *RLys Buffer, RW1 Buffer, RW2 Buffer, REB, 10x DNase Reaction Buffer, AF Reagent, DNase I, Nuclease free water*

**1.2 Relevant identified uses of the substance or mixture and uses advised against:** *no data available*

– Application of the substance / the preparation: *Laboratory chemistry*

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

– Manufacturer/supplier:

**BLIRT S.A.**

*Trzy Lipy 3/1.38*

*80-172, Gdansk*

*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*

# Safety data sheet

according to 1907/2006/EC, Article 31

Print date: 21.05.2018

Updated: 21.05.2018

Version: 3



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

### 1.1 Product identifier

– Trade name: **RLys Buffer**

– Hazardous components: *Guanidine thiocyanate, N-Lauroylsarcosine sodium*

– CAS number: *593-84-0 (Guanidine thiocyanate), 137-16-6 (N-Lauroylsarcosine sodium)*

– EC number: *209-812-1 (Guanidine thiocyanate), 205-281-5 (N-Lauroylsarcosine sodium)*

1.2 Relevant identified uses of the substance or mixture and uses advised against: *no data available*

– Application of the substance / the preparation: *Laboratory chemicals*

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

– Manufacturer/supplier:

**BLIRT S.A.**

*Trzy Lipy 3/1.38*

*80-172, Gdansk*

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### 1.4 Emergency telephone number:

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*112*

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

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



GHS06

*Acute Tox. 3 H331 Toxic if inhaled.*

*Acute Tox. 4 H302 Harmful if swallowed.*

*Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effect.*

## 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:** *Danger*

– **Hazard-determining components of labeling:** *Guanidine thiocyanate,*

*N-Lauroylsarcosine sodium*

– **Hazard statements:**

*H302 Harmful if swallowed.*

*H331 Toxic if inhaled.*

*H412 Harmful to aquatic life with long lasting effects.*

– **Precautionary statement(s):**

**Prevention:**

**P261** Avoid breathing dust/fumes/gas/mist/vapours/spray.

**P271** Use only outdoors or in a well-ventilated area.

**P273** Avoid release to the environment.

**Response:**

**P304+P340 P311** IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.

## - Additional information

**EUH032 Contact with acids liberates very toxic gas.**

### 2.3 Other hazards

*Not applicable.*

## 3. Composition/information on ingredients

### 3.2 Chemical characterization: Mixture

<b>Dangerous ingredients</b>		
<b>CAS: 593-84-0</b> <b>EINECS: 209-812-1</b>	<i>Guanidine thiocyanate</i> <i>Acute Tox. 4, H302, Acute Tox. 4 H312, Acute Tox. 4 H332,</i> <i>Aquatic Chronic 3 H412</i>	40-50 %
<b>CAS: 137-16-6</b> <b>EINECS: 205-281-5</b>	<i>N-Lauroylsarcosine sodium</i> <i>Acute Tox. 1 H330, Skin Irrit 2 H315, Eye Dam. 1 H318, Skin</i> <i>Sens. 1 H317</i>	0-10%

## 4. First aid measures

### 4.1 Description of first aid measures

- **After inhalation:** *Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor immediately.*
- **After skin contact:** *Wash with soap and plenty of water. Immediately remove any clothing soiled by the product.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*
- **After swallowing:** *Make victim drink water (maximum of 2 drinking glasses). Consult a doctor immediately.*

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

*The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in 11.*

### 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 spray, CO<sub>2</sub> or powder. Fight larger fires with water spray or alcohol resistant foam.*

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

– Formation of toxic gases is possible during heating or in case of fire. In case of fire, the following can be released: Nitrogen oxides ( $NO_x$ ), carbon oxides ( $CO$ ,  $CO_2$ ), sulfur oxides ( $SO_2$ ,  $SO_3...$ )

### 5.3 Advise for firefighters

– **Protective equipment:** *Wear self-contained respiratory protective device.*

#### **Additional information**

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

## 6. Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:** *Do not inhale. Avoid mixture contact. Ensure adequate ventilation.*

**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. Dispose of the material collected according to regulations. Ensure adequate ventilation. Clean up affected area.*

### 6.4 References to others sections

*See section 7 for information on safe handling.*

*See section 8 for information on personal protection equipment.*

*See section 13 for disposal information.*

## 7. Handling and storage

**7.1 Precautions for safe handling:** *Ensure good ventilation at the workplace.*

### 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:** *Do not store with acids.*

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

– **Recommended storage temperature:** **15-25°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. Avoid contact with the eyes and skin. Change contaminated clothing.*

• **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 P3.

• **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: Light/strong heating.

10.3 Possibility of hazardous reaction: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: Acids.

10.6 Hazardous decomposition product: See chapter 5.

## 11. Toxicological information

### 11.1 Information on toxicological effects

Oral/Ingestion:  $ATE_{mix} > 1084$

Inhalation/Respiratory:  $ATE_{mix} = 7$

Dermal/Skin:  $ATE_{mix} > 2000$

– Primary irritant effect:

• On the skin: No data available.

- **On the eye:** *No data available.*
- **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.*
- General notes:** *Hazardous for water. Do not allow to enter waters, waste water or soil.*

## 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 dangerous goods/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.*



# Safety data sheet

according to 1907/2006/EC, Article 31

Print date: 21.05.2018

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Version:3



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

### 1.1 Product identifier

– Trade name: RW1 Buffer

– Hazardous components: Guanidine thiocyanate, Ethanol

– CAS number: 593-84-0 (Guanidine thiocyanate), 64-17-5 (Ethanol)

– EC number: 209-812-1 (Guanidine thiocyanate), 200-578-6 (Ethanol)

1.2 Relevant identified uses of the substance or mixture and uses advised against: *no data available*

– Application of the substance / the preparation: *Laboratory chemicals*

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

– Manufacturer/supplier:

**BLIRT S.A.**

*Trzy Lipy 3/1.38*

*80-172, Gdansk*

*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*

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

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



*GHS02*

*Flam Liq.2 H225 Highly flammable liquid and vapour.*

### 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: *Danger*

– Hazard-determining components of labeling: *Guanidine thiocyanate, Ethanol*

– Hazard statements:

*H225 Highly flammable liquid and vapour.*

– Precautionary statements:

**Prevention:**

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Response:**

**P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

### 2.3 Other hazards

**EUH032** Contact with acids liberates very toxic gas.

## 3. Composition/information on ingredients

### 3.2 Chemical characterization: *Mixture*

<b><i>Dangerous ingredients</i></b>		
<b>CAS: 593-84-0</b> <b>EINECS: 209-812-1</b>	<i>Guanidine thiocyanate</i> Acute Tox. 4, H302, <i>Acute Tox. 4 H312, Acute Tox. 4 H332, Aquatic Chronic 3 H412</i>	20-30 %
<b>CAS: 64-17-5</b> <b>EINECS: 200-578-6</b>	<i>Ethanol</i> Flam Liq.2 H225	10-20 %

## 4. First aid measures

### 4.1 Description of first aid measures

– **After inhalation:** *Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor if symptoms persist.*

– **After skin contact:** *Wash with water and soap. Immediately remove any clothing soiled by the product. Seek medical treatment.*

– **After eye contact:** *Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*

– **After swallowing:** *Make victim drink water (maximum of 2 drinking glasses). Consult a doctor immediately.*

### 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 spray, CO<sub>2</sub> or powder. Fight larger fires with water spray or alcohol resistant foam.*

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

– **Formation of toxic gases is possible during heating or in case of fire. In case of fire, the following can be released:** *carbon oxides (CO, CO<sub>2</sub>)*

**5.3 Advise for firefighters**

– **Protective equipment:** *Wear self-contained respiratory protective device.*

**Additional information**

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

## **6. Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures:** *Do not inhale.*

*Avoid mixture contact. Ensure adequate ventilation.*

**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. Dispose of the material collected according to regulations. Ensure adequate ventilation. Clean up affected area.*

**6.3 References to others sections**

*See section 7 for information on safe handling.*

*See section 8 for information on personal protection equipment.*

*See section 13 for disposal information.*

## **7. Handling and storage**

**7.1 Precautions for safe handling:** *Keep container tightly sealed.*

*Keep ignition sources away-do not smoke. Protect against electrostatic charges.*

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

– **Requirements to be met by storerooms and receptacles:** *Store in cool location.*

– **Information about storage in one common storage facility:** *Keep away from ignition and heat sources.*

– **Further information about storage conditions:** *Away from sources of ignition and heat.*

– **Recommended storage temperature:** **15-25°C**

– **Storage class:** 3

**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. Avoid contact with the eyes and skin. Change contaminated clothing.*

- **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 P3.*

- **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 data available.*

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

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

**10.5 Incompatible materials:** *Acids.*

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

## 11. Toxicological information

### 11.1 Information on toxicological effects

– **Acute toxicity:**

*Oral/Ingestion:  $ATE_{mix} > 2000$*

*Inhalation/Respiratory:  $ATE_{mix} > 20$*

*Dermal/Skin:  $ATE_{mix} > 2000$*

– **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.*

**General notes:** *Hazardous for water. Do not allow to enter waters, waste water or soil.*

## 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 dangerous goods/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.*

# Safety data sheet



according to 1907/2006/EC, Article 31

Print date: 21.05.2018

Updated: 21.05.2018

Version: 2

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

### 1.1 Product identifier

- Trade name: **AF Reagent**
- Hazardous components: *Octamethylcyclotetrasiloxan, baseoil*
- CAS number: *64742-53-6 (baseoil), 556-67-2 (Octamethylcyclotetrasiloxan)*
- EC number: *265-156-6 (baseoil), 209-136-7 (Octamethylcyclotetrasiloxan)*

### 1.2 Relevant identified uses of the substance or mixture and uses advised against: *no data available*

- Application of the substance / the preparation: *Laboratory chemicals*

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

- Manufacturer/supplier:

**BLIRT S.A.**

*Trzy Lipy 3/1.38*

*80-172, Gdansk*

*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*

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

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



**GHS08**

*Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.*

*Repr. 2 H361 Suspected of damaging fertility or the unborn child.*

## 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: *Danger*

Hazard-determining components of labeling: *Octamethylcyclotetrasiloxan, baseoil*

– Hazard statements:

*H304 May be fatal if swallowed and enters airways.*

*H361 Suspected of damaging fertility or the unborn child.*

– Precautionary statement(s):

Prevention:

**P202** Do not handle until all safety precautions have been read and understood.

Response:

**P301+P310 P331** IF SWALLOWED: Immediately call a POISON Center/doctor. Do NOT induce vomiting.

**P308+P313** If exposed: Call a POISON CENTER or doctor.

## 2.3 Other hazards

*Not applicable.*

## 3 Composition/information on ingredients

### 3.2 Chemical characterization: *Mixture*

<i>Dangerous ingredients</i>		
<b>CAS: 64742-53-6</b>	<i>baseoil</i>	<i>0-10 %</i>
<b>EINECS: 265-156-6</b>	<i>Asp. Tox. 1, H304</i>	
<b>CAS: 556-67-2</b>	<i>Octamethylcyclotetrasiloxan</i>	<i>0-10 %</i>
<b>EINECS: 209-136-7</b>	<i>Flam. Liq. 3, H226; Repr. 2, H361; Aquatic Chronic 4, H413</i>	

## 4 First aid measures

### 4.1 Description of first aid measures

– **After inhalation:** *Supply fresh air, consult a doctor immediately.*

– **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. Call a doctor immediately.*

– **After swallowing:** *Make victim drink water (maximum of 2 drinking glasses), do not induce vomiting. Call for a doctor immediately.*

### 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. Fight larger fires with spray or alcohol resistant foam.*

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

– **Forms explosive mixtures with air on intense heating. Vapours are heavier than air and may spread along floors. In case of fire, the following can be released:** *nitrogen oxides (NO<sub>x</sub>), carbon oxides (CO, CO<sub>2</sub>), hydrogen chloride (HCl).*

**5.3 Advise for firefighters**

– **Protective equipment:** *Wear self-contained respiratory protective device.*

**Additional information**

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

## 6 Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:** *Do not inhale dust, avoid mixture contact, ensure adequate ventilation.*

**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.*

**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:** *Keep receptacles tightly sealed.*

**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:** **15-25°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:** *No data available.*

**10.2 Chemical stability:** *No data available.*

– **Thermal decomposition/conditions to be avoided:** *No data available.*

**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**

– **Primary irritant effect:**

- **On the skin:** *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.*

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

– **General notes:** *Water hazard class 1: slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*

## 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 dangerous goods/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.*

# Safety data sheet

according to 1907/2006/EC, Article 31

Print date: 19.01.2018

Updated: 19.01.2018

Version: 3



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

### 1.1 Product identifier

– Trade name: REB (RNA Elution Buffer), RW2 Buffer, 10x DNase Reaction Buffer, Nuclease free water

– Hazardous components: *none*

1.2 Relevant identified uses of the substance or mixture and uses advised against: *no data available*

– Application of the substance / the preparation: *Laboratory chemicals*

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

– Manufacturer/supplier:

**BLIRT S.A.**

*Trzy Lipy 3/1.38*

*80-172, Gdansk*

*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*

## 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-determining components of labelling: *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. In case of complaints, consult a doctor.*

– **After skin contact:** *Wash with water and soap. If skin irritation continues, consult a doctor.*

– **After eye contact:** *Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*

– **After swallowing:** *Rinse out mouth. If symptoms persist consult a 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. Fight larger fires with water spray or alcohol resistant foam.*

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

– **In case of fire, the following can be released:** *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 firefighting 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 References to others sections

*See section 7 for information on safe handling.*

*See section 8 for information on personal protection 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: **15-25°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 dangerous reactions known.*

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

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

10.6 Hazardous decomposition product: *See chapter 5.*

## 11. Toxicological information

### 11.1 Information on toxicological effects

– Primary irritant effect:

• On the skin: *No data available.*

• On the eye: *No data available.*

– 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 dangerous goods/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.*

# Safety data sheet

according to 1907/2006/EC, Article 31

Print date: 19.01.2018

Updated: 19.01.2018

Version: 3



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

### 1.1 Product identifier

- Trade name: DNase I
- Hazardous components: *none*

### 1.2 Relevant identified uses of the substance or mixture and uses advised against: *no data available*

- Application of the substance / the preparation: *Laboratory chemicals*

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

- Manufacturer/supplier:

**BLIRT S.A.**

Trzy Lipy 3/1.38

80-172, Gdansk

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

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008: *Not a hazardous substance according to Regulation (EC) No. 1272/2008.*

### 2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008  
*The substance is not classified and labelled according to the CLP regulation.*
- Hazard pictograms: *Not applicable.*
- Signal word: *Not applicable.*
- Hazard-determining components of labelling: *Not applicable.*
- Hazard statements: *Not applicable.*
- Precautionary statement(s): *Not applicable.*

### 2.3 Other hazards

- Not applicable.*

### 3 Composition/information on ingredients

#### 3.1 Chemical characterization: *Substance*

– **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. In case of complaints, consult a doctor.*

– **After skin contact:** *Wash with water and soap. If skin irritation continues, consult a doctor.*

– **After eye contact:** *Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*

– **After swallowing:** *Rinse out mouth. If symptoms persist consult a 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. Fight larger fires with water spray or alcohol resistant foam.*

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

– **In case of fire, the following can be released:** *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 firefighting water in accordance with official regulations.*

### 6 Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:** *Avoid substance 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 References to others sections

*See section 7 for information on safe handling.*

*See section 8 for information on personal protection 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: **15-25°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: *Powder*

**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 dangerous reactions known.*

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

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

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

## 11 Toxicological information

**11.1 Information on toxicological effects**

– **Primary irritant effect:**

• **On the skin:** *No data available.*

• **On the eye:** *No data available.*

– **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 dangerous goods/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.*