

# Material Safety Data Sheet

Revision Date: 1-June-2016



## Product and Company Information

|                 |                                               |
|-----------------|-----------------------------------------------|
| Product Name    | <i>EasyPure</i> ® FFPE Tissue Genomic DNA Kit |
| Cat. No.        | EE191                                         |
| Company         | TransGen Biotech Co., Ltd.                    |
| Technical Phone | +86-400-898-0321                              |
| Fax             | +86-10-57815011                               |
| E-mail Address  | trans@transgen.com.cn                         |

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### The following TransGen products are included:

Lysis Buffer 15 (LB15)

Binding Buffer 15 (BB15)

Clean Buffer 15 (CB15)

Wash Buffer15 (WB15)

Elution Buffer (EB)

Proteinase K

Genomic Spin Columns with Collection Tubes

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# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

|                 |                            |
|-----------------|----------------------------|
| Product Name    | Lysis Buffer 15 (LB15)     |
| Cat. No.        | EE191-0101                 |
| Company         | TransGen Biotech Co., Ltd. |
| Technical Phone | +86-400-898-0321           |
| Fax             | +86-10-57815011            |
| E-mail Address  | trans@transgen.com.cn      |

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## 2. Hazards Identification

GHS - Classification

Signal Word: Warning



Hazard statements: H302 – Harmful if swallowed.  
H315 - Causes skin irritation.  
H319- Causes serious eye irritation.

Precautionary statements:

P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 - Specific treatment (see on this label).  
P362 - Take off contaminated clothing and wash before reuse.  
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P501- Dispose of contents/container in accordance with local /regional/ national/ international regulations.

### Potential health effects

|             |                                                    |
|-------------|----------------------------------------------------|
| <b>Eyes</b> | May cause eye irritation with susceptible persons. |
| <b>Skin</b> | May be harmful in contact with skin.               |

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|                   |                              |
|-------------------|------------------------------|
| <b>Inhalation</b> | Harmful by inhalation.       |
| <b>Ingestion</b>  | May be harmful if swallowed. |

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### 3. Composition

| Chemical Name        | CAS-No  | Weight % |
|----------------------|---------|----------|
| guanidinium chloride | 50-01-1 | 25-50    |

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

### 4. First Aid Measures

|                |                                                                                                                      |
|----------------|----------------------------------------------------------------------------------------------------------------------|
| General advice | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).      |
| Eye contact    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact   | Wash off immediately with plenty of water for at least 15 minutes.                                                   |
| Inhalation     | Move to fresh air.                                                                                                   |
| Ingestion      | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.                        |

|                    |                        |
|--------------------|------------------------|
| Notes to physician | Treat symptomatically. |
|--------------------|------------------------|

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### 5. Fire-Fighting Measures

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Suitable extinguishing media                  | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective suit.       |

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### 6. Accidental Release Measures

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Personal precautions      | Use personal protective equipment.                    |
| Methods for cleaning up   | Soak up with inert absorbent material.                |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

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## 7. Handling and Storage

Handling Always wear recommended Personal Protective Equipment. No special handling advice required.

Storage Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers

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## 8. Exposure Controls/Personal Protection

Exposure limits:

| Chemical Name        | OSHA PEL (TWA) | OSHA PEL (STEL) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|----------------------|----------------|-----------------|-----------------|------------------|
| Guanidinium chloride | none           | none            | none            | none             |

## 9. Physical and Chemical Properties

General Information

Form: liquid

Color: transparent

Water solubility: soluble

Others: No information available.

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## 10. Stability and Reactivity

Stability Stable under normal conditions

Materials to avoid Strong oxidising agents.

Polymerization None under normal processing.

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## 11. Toxicological Information

| Chemical Name        | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LC50 (inhalation, rat/mouse) |
|----------------------|------------------------|---------------------------|------------------------------|
| Guanidinium chloride | 475 mg/kg (Rat)        | no data available         | no data available            |

Principle Routes of Exposure/  
Potential Health effects

Eyes May cause eye irritation with susceptible persons.

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|                       |                                      |
|-----------------------|--------------------------------------|
| Skin                  | May be harmful in contact with skin. |
| Inhalation            | Harmful by inhalation.               |
| Ingestion             | May be harmful if swallowed.         |
| Carcinogenic effects  | None.                                |
| Mutagenic effects     | None.                                |
| Reproductive toxicity | None.                                |

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## 12. Ecological Information

|                     |                           |
|---------------------|---------------------------|
| Ecotoxicity effects | No information available. |
| Mobility            | No information available. |
| Biodegradation      | No information available. |
| Bioaccumulation     | No information available. |

## 13. Disposal Considerations

Dispose of in accordance with local regulations.

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## 14. Transport Information

IATA

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |
| Hazard class         | none                                                                |
| Subsidiary Class     | none                                                                |
| Packing group        | none                                                                |
| UN-No                | none                                                                |

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## 15. Regulatory Information

|                           |          |
|---------------------------|----------|
| International Inventories | Complies |
|---------------------------|----------|

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## 16. Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the

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recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPPOSE

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**End of Safety Data Sheet**

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# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

Product Name Binding Buffer15 (BB15)  
Cat. No. EE191-0102  
Company TransGen Biotech Co., Ltd.  
Technical Phone +86-400-898-0321  
Fax +86-10-57815011  
E-mail Address trans@transgen.com.cn

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## 2. Hazards Identification

GHS - Classification

Signal Word: Warning



Health hazard

|                                   |            |
|-----------------------------------|------------|
| Acute oral toxicity               | Category 4 |
| Skin corrosion/irritation         | Category 2 |
| Serious eye damage/eye irritation | Category 2 |

Hazard statements: H302 – Harmful if swallowed.  
H315 - Causes skin irritation.  
H319- Causes serious eye irritation.

Precautionary statements:

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

### Potential health effects

**Eyes** May cause eye irritation with susceptible persons.  
**Skin** May be harmful in contact with skin.

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|                   |                              |
|-------------------|------------------------------|
| <b>Inhalation</b> | Harmful by inhalation.       |
| <b>Ingestion</b>  | May be harmful if swallowed. |

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### 3. Composition

| Chemical Name             | CAS-No  | Weight % |
|---------------------------|---------|----------|
| guanidinium hydrochloride | 50-01-1 | 30-60    |

Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product. We recommend handling all chemicals with caution.

### 4. First Aid Measures

|                |                                                                                                                      |
|----------------|----------------------------------------------------------------------------------------------------------------------|
| General advice | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).      |
| Eye contact    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact   | Wash off immediately with plenty of water for at least 15 minutes.                                                   |
| Inhalation     | Move to fresh air.                                                                                                   |
| Ingestion      | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.                        |

Notes to physician    Treat symptomatically.

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### 5. Fire-Fighting Measures

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Suitable extinguishing media                  | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective suit.       |

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### 6. Accidental Release Measures

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Personal precautions      | Use personal protective equipment.                    |
| Methods for cleaning up   | Soak up with inert absorbent material.                |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

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## 7. Handling and Storage

Handling Always wear recommended Personal Protective Equipment. No special handling advice required.

Storage Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers

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## 8. Exposure Controls/Personal Protection

Exposure limits:

| Chemical Name             | OSHA PEL (TWA) | OSHA PEL (STEL) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|---------------------------|----------------|-----------------|-----------------|------------------|
| Guanidinium hydrochloride | none           | none            | none            | none             |

## 9. Physical and Chemical Properties

General Information

Form: liquid

Color: transparent

Water solubility: soluble

Others: No information available.

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## 10. Stability and Reactivity

Stability Stable under normal conditions

Materials to avoid Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.

Polymerization None under normal processing.

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## 11. Toxicological Information

| Chemical Name             | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LC50 (inhalation, rat/mouse) |
|---------------------------|------------------------|---------------------------|------------------------------|
| Guanidinium hydrochloride | no data available      | > 2000 mg/kg (Rabbit)     | no data available            |

Principle Routes of Exposure/  
Potential Health effects

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|                       |                                                    |
|-----------------------|----------------------------------------------------|
| Eyes                  | May cause eye irritation with susceptible persons. |
| Skin                  | May be harmful in contact with skin.               |
| Inhalation            | Harmful by inhalation.                             |
| Ingestion             | May be harmful if swallowed.                       |
| Carcinogenic effects  | None.                                              |
| Mutagenic effects     | None.                                              |
| Reproductive toxicity | None.                                              |

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## 12. Ecological Information

|                     |                           |
|---------------------|---------------------------|
| Ecotoxicity effects | No information available. |
| Mobility            | No information available. |
| Biodegradation      | No information available. |
| Bioaccumulation     | No information available. |

## 13. Disposal Considerations

Dispose of in accordance with local regulations.

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## 14. Transport Information

IATA

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |
| Hazard class         | none                                                                |
| Subsidiary Class     | none                                                                |
| Packing group        | none                                                                |
| UN-No                | none                                                                |

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## 15. Regulatory Information

|                           |          |
|---------------------------|----------|
| International Inventories | Complies |
|---------------------------|----------|

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## 16. Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE

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**End of Safety Data Sheet**

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# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

Product Name                      Clean Buffer 15 (CB15)  
Cat. No.                              EE191-0103  
Company                              TransGen Biotech Co., Ltd.  
Technical Phone                      +86-400-898-0321  
Fax                                      +86-10-57815011  
E-mail Address                      trans@transgen.com.cn

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## 2. Hazards Identification

GHS - Classification

Signal Word:                      Warning



Health hazard

|                                   |            |
|-----------------------------------|------------|
| Skin corrosion/irritation         | Category 3 |
| Serious eye damage/eye irritation | Category 2 |

Hazard statements: H316 – Causes mild skin irritation.  
H319- Causes serious eye irritation.

Precautionary statements:

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  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P264 - Wash hands thoroughly after handling

### Potential health effects

**Eyes**                      May cause eye irritation with susceptible persons.  
**Skin**                        May be harmful in contact with skin.  
**Inhalation**                Harmful by inhalation.

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**Ingestion**      May be harmful if swallowed.

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### 3. Composition

| Chemical Name             | CAS-No  | Weight % |
|---------------------------|---------|----------|
| guanidinium hydrochloride | 50-01-1 | 7-13     |

Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product. We recommend handling all chemicals with caution.

### 4. First Aid Measures

|                |                                                                                                                      |
|----------------|----------------------------------------------------------------------------------------------------------------------|
| General advice | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).      |
| Eye contact    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact   | Wash off immediately with plenty of water for at least 15 minutes.                                                   |
| Inhalation     | Move to fresh air.                                                                                                   |
| Ingestion      | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.                        |

Notes to physician      Treat symptomatically.

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### 5. Fire-Fighting Measures

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Suitable extinguishing media                  | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective suit.       |

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### 6. Accidental Release Measures

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Personal precautions      | Use personal protective equipment.                    |
| Methods for cleaning up   | Soak up with inert absorbent material.                |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

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## 7. Handling and Storage

Handling Always wear recommended Personal Protective Equipment. No special handling advice required.

Storage Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers

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## 8. Exposure Controls/Personal Protection

Exposure limits:

| Chemical Name             | OSHA PEL (TWA) | OSHA PEL (STEL) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|---------------------------|----------------|-----------------|-----------------|------------------|
| Guanidinium hydrochloride | none           | none            | none            | none             |

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## 9. Physical and Chemical Properties

General Information

Form: liquid

Color: transparent

Water solubility: soluble

Others: No information available.

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## 10. Stability and Reactivity

Stability Stable under normal conditions

Materials to avoid Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.

Polymerization None under normal processing.

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## 11. Toxicological Information

| Chemical Name             | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LC50 (inhalation, rat/mouse) |
|---------------------------|------------------------|---------------------------|------------------------------|
| Guanidinium hydrochloride | no data available      | > 2000 mg/kg (Rabbit)     | no data available            |

Principle Routes of Exposure/

Potential Health effects

Eyes May cause eye irritation with susceptible persons.

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|                       |                                      |
|-----------------------|--------------------------------------|
| Skin                  | May be harmful in contact with skin. |
| Inhalation            | Harmful by inhalation.               |
| Ingestion             | May be harmful if swallowed.         |
| Carcinogenic effects  | None.                                |
| Mutagenic effects     | None.                                |
| Reproductive toxicity | None.                                |

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## 12. Ecological Information

|                     |                           |
|---------------------|---------------------------|
| Ecotoxicity effects | No information available. |
| Mobility            | No information available. |
| Biodegradation      | No information available. |
| Bioaccumulation     | No information available. |

## 13. Disposal Considerations

Dispose of in accordance with local regulations.

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## 14. Transport Information

IATA

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |
| Hazard class         | none                                                                |
| Subsidiary Class     | none                                                                |
| Packing group        | none                                                                |
| UN-No                | none                                                                |

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## 15. Regulatory Information

|                           |          |
|---------------------------|----------|
| International Inventories | Complies |
|---------------------------|----------|

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## 16. Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE

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**End of Safety Data Sheet**

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# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

|                 |                            |
|-----------------|----------------------------|
| Product Name    | Wash Buffer 15 (WB15)      |
| Cat. No.        | EE191-0104                 |
| Company         | TransGen Biotech Co., Ltd. |
| Technical Phone | +86-400-898-0321           |
| Fax             | +86-10-57815011            |
| E-mail Address  | trans@transgen.com.cn      |

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## 2. Hazards Identification

Not hazardous

### Potential Health effects

|                   |                                                    |
|-------------------|----------------------------------------------------|
| <b>Eyes</b>       | May cause eye irritation with susceptible persons. |
| <b>Skin</b>       | May cause skin irritation in susceptible persons.  |
| <b>Inhalation</b> | May be harmful by inhalation.                      |
| <b>Ingestion</b>  | May be harmful if swallowed.                       |

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## 3. Composition

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

## 4. First Aid Measures

|                |                                                                                                                      |
|----------------|----------------------------------------------------------------------------------------------------------------------|
| General advice | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).      |
| Eye contact    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact   | Wash off immediately with plenty of water for at least 15 minutes.                                                   |
| Inhalation     | Move to fresh air.                                                                                                   |

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|           |                                                                                                                                  |
|-----------|----------------------------------------------------------------------------------------------------------------------------------|
| Ingestion | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Not an expected route of exposure. |
|-----------|----------------------------------------------------------------------------------------------------------------------------------|

|                    |                        |
|--------------------|------------------------|
| Notes to physician | Treat symptomatically. |
|--------------------|------------------------|

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## 5. Fire-Fighting Measures

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Suitable extinguishing media                  | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective suit.       |

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## 6. Accidental Release Measures

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Personal precautions      | Use personal protective equipment.                    |
| Methods for cleaning up   | Soak up with inert absorbent material.                |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

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## 7. Handling and Storage

|                               |                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. |
| Conditions for safe storage   | Keep in a dry, cool and well-ventilated place.                                                                     |

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## 8. Exposure Controls/Personal Protection

|                  |                                                  |
|------------------|--------------------------------------------------|
| Exposure limits: | We are not aware of any national exposure limit. |
|------------------|--------------------------------------------------|

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## 9. Physical and Chemical Properties

General Information

|       |        |
|-------|--------|
| Form: | Liquid |
|-------|--------|

|                   |         |
|-------------------|---------|
| Water solubility: | Soluble |
|-------------------|---------|

|         |                           |
|---------|---------------------------|
| Others: | No information available. |
|---------|---------------------------|

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## 10. Stability and Reactivity

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|                         |                                                             |
|-------------------------|-------------------------------------------------------------|
| Stability               | Stable under normal conditions                              |
| Materials to avoid      | No dangerous reaction known under conditions of normal use. |
| Hazardous decomposition | no data available                                           |

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## 11. Toxicological Information

Acute toxicity - No information available.

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### Principle Routes of Exposure/ Potential

#### Health effects

|                       |                                                    |
|-----------------------|----------------------------------------------------|
| Eyes                  | May cause eye irritation with susceptible persons. |
| Skin                  | May cause skin irritation in susceptible persons.  |
| Inhalation            | May be harmful by inhalation.                      |
| Ingestion             | May be harmful if swallowed.                       |
| Carcinogenic effects  | No information available.                          |
| Mutagenic effects     | No information available.                          |
| Reproductive toxicity | No information available.                          |
| Sensitization         | No information available.                          |

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## 12. Ecological Information

|                     |                           |
|---------------------|---------------------------|
| Ecotoxicity effects | No information available. |
| Mobility            | No information available. |
| Biodegradation      | Inherently biodegradable. |
| Bioaccumulation     | Does not bioaccumulate.   |

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## 13. Disposal Considerations

Dispose of in accordance with local regulations.

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## 14. Transport Information

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| IATA                 | Not dangerous goods                                                 |
| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |

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|                  |      |
|------------------|------|
| Hazard class     | none |
| Subsidiary Class | none |
| Packing group    | none |
| UN-No            | none |

## 15. Regulatory Information

|                           |          |
|---------------------------|----------|
| International Inventories | Complies |
|---------------------------|----------|

## 16. Other Information

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**End of Safety Data Sheet**

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# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

|                 |                            |
|-----------------|----------------------------|
| Product Name    | Elution Buffer (EB)        |
| Cat. No.        | GC101-03                   |
| Company         | TransGen Biotech Co., Ltd. |
| Technical Phone | +86-400-898-0321           |
| Fax             | +86-10-57815011            |
| E-mail Address  | trans@transgen.com.cn      |

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## 2. Hazards Identification

Not hazardous

### Potential Health effects

|                   |                                                    |
|-------------------|----------------------------------------------------|
| <b>Eyes</b>       | May cause eye irritation with susceptible persons. |
| <b>Skin</b>       | May cause skin irritation in susceptible persons.  |
| <b>Inhalation</b> | May be harmful by inhalation.                      |
| <b>Ingestion</b>  | May be harmful if swallowed.                       |

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## 3. Composition

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

## 4. First Aid Measures

|                |                                                                                                                      |
|----------------|----------------------------------------------------------------------------------------------------------------------|
| General advice | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).      |
| Eye contact    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact   | Wash off immediately with plenty of water for at least 15 minutes.                                                   |
| Inhalation     | Move to fresh air.                                                                                                   |

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|           |                                                                                                                                  |
|-----------|----------------------------------------------------------------------------------------------------------------------------------|
| Ingestion | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Not an expected route of exposure. |
|-----------|----------------------------------------------------------------------------------------------------------------------------------|

|                    |                        |
|--------------------|------------------------|
| Notes to physician | Treat symptomatically. |
|--------------------|------------------------|

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## 5. Fire-Fighting Measures

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Suitable extinguishing media                  | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective suit.       |

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## 6. Accidental Release Measures

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Personal precautions      | Use personal protective equipment.                    |
| Methods for cleaning up   | Soak up with inert absorbent material.                |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

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## 7. Handling and Storage

|                               |                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. |
| Conditions for safe storage   | Keep in a dry, cool and well-ventilated place.                                                                     |

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## 8. Exposure Controls/Personal Protection

|                  |                                                  |
|------------------|--------------------------------------------------|
| Exposure limits: | We are not aware of any national exposure limit. |
|------------------|--------------------------------------------------|

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## 9. Physical and Chemical Properties

General Information

|       |        |
|-------|--------|
| Form: | Liquid |
|-------|--------|

|                   |         |
|-------------------|---------|
| Water solubility: | Soluble |
|-------------------|---------|

|         |                           |
|---------|---------------------------|
| Others: | No information available. |
|---------|---------------------------|

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## 10. Stability and Reactivity

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---

|                         |                                                             |
|-------------------------|-------------------------------------------------------------|
| Stability               | Stable under normal conditions                              |
| Materials to avoid      | No dangerous reaction known under conditions of normal use. |
| Hazardous decomposition | no data available                                           |

---

## 11.Toxicological Information

Acute toxicity - No information available.

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### Principle Routes of Exposure/ Potential

#### Health effects

|                       |                                                    |
|-----------------------|----------------------------------------------------|
| Eyes                  | May cause eye irritation with susceptible persons. |
| Skin                  | May cause skin irritation in susceptible persons.  |
| Inhalation            | May be harmful by inhalation.                      |
| Ingestion             | May be harmful if swallowed.                       |
| Carcinogenic effects  | No information available.                          |
| Mutagenic effects     | No information available.                          |
| Reproductive toxicity | No information available.                          |
| Sensitization         | No information available.                          |

---

## 12.Ecological Information

|                     |                           |
|---------------------|---------------------------|
| Ecotoxicity effects | No information available. |
| Mobility            | No information available. |
| Biodegradation      | Inherently biodegradable. |
| Bioaccumulation     | Does not bioaccumulate.   |

---

## 13.Disposal Considerations

Dispose of in accordance with local regulations.

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## 14. Transport Information

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| IATA                 | Not dangerous goods                                                 |
| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |

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|                  |      |
|------------------|------|
| Hazard class     | none |
| Subsidiary Class | none |
| Packing group    | none |
| UN-No            | none |

## 15. Regulatory Information

|                           |          |
|---------------------------|----------|
| International Inventories | Complies |
|---------------------------|----------|

## 16. Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE

**End of Safety Data Sheet**

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# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

Product Name                      Proteinase K  
Cat. No.                              GE201-01  
Company                              TransGen Biotech Co., Ltd.  
Technical Phone                      +86-400-898-0321  
Fax                                      +86-10-57815011  
E-mail Address                      trans@transgen.com.cn

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## 2. Hazards Identification

GHS - Classification

Signal Word:                      Danger



Health hazard

|                                   |            |
|-----------------------------------|------------|
| Skin corrosion/irritation         | Category 2 |
| Serious eye damage/eye irritation | Category 2 |
| Respiratory sensitisation         | Category 1 |

Hazard statements: H315 - Causes skin irritation.  
H319- Causes serious eye irritation.  
H334- May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements:

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

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician

### Potential acute health effects

**Eyes**                      Irritating to eyes.

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TransGen Biotech Co., Ltd.

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|                   |                                                                                                               |
|-------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Skin</b>       | Irritating to skin.                                                                                           |
| <b>Inhalation</b> | Irritating to respiratory system.                                                                             |
| <b>Ingestion</b>  | May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. |

---

### 3. Composition

| Chemical Name                         | CAS-No     | Weight % |
|---------------------------------------|------------|----------|
| Proteinase, tritirachium album serine | 39450-01-6 | 1-2.5    |

We recommend handling all chemicals with caution.

### 4. First Aid Measures

|                |                                                                                                                      |
|----------------|----------------------------------------------------------------------------------------------------------------------|
| General advice | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).      |
| Eye contact    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact   | Wash off immediately with plenty of water for at least 15 minutes.                                                   |
| Inhalation     | Move to fresh air.                                                                                                   |
| Ingestion      | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.                        |

Notes to physician    Treat symptomatically.

---

### 5. Fire-Fighting Measures

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Suitable extinguishing media                  | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective suit.       |

---

### 6. Accidental Release Measures

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Personal precautions      | Use personal protective equipment.                    |
| Methods for cleaning up   | Soak up with inert absorbent material.                |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

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## 7. Handling and Storage

Handling Always wear recommended Personal Protective Equipment. No special handling advice required.

Storage Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers

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## 8. Exposure Controls/Personal Protection

Exposure limits:

| Chemical Name                         | OSHA PEL (TWA) | OSHA PEL (STEL) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|---------------------------------------|----------------|-----------------|-----------------|------------------|
| Proteinase, tritirachium album serine | none           | none            | none            | none             |

## 9. Physical and Chemical Properties

General Information

Form: liquid

Color: transparent

Water solubility: soluble

Others: No information available.

---

## 10. Stability and Reactivity

Stability Stable under normal conditions

Materials to avoid Strong oxidising agents.

Polymerization None under normal processing.

---

## 11. Toxicological Information

| Chemical Name                         | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LC50 (inhalation, rat/mouse) |
|---------------------------------------|------------------------|---------------------------|------------------------------|
| Proteinase, tritirachium album serine | no data available      | no data available         | no data available            |

Principle Routes of Exposure/  
Potential Health effects

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|                       |                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------|
| Eyes                  | Irritating to eyes.                                                                                          |
| Skin                  | Irritating to skin.                                                                                          |
| Inhalation            | Irritating to respiratory system.                                                                            |
| Ingestion             | May be harmful if swallowed Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. |
| Carcinogenic effects  | None.                                                                                                        |
| Mutagenic effects     | None.                                                                                                        |
| Reproductive toxicity | None.                                                                                                        |

---

## 12. Ecological Information

|                     |                           |
|---------------------|---------------------------|
| Ecotoxicity effects | No information available. |
| Mobility            | No information available. |
| Biodegradation      | No information available. |
| Bioaccumulation     | No information available. |

## 13. Disposal Considerations

Dispose of in accordance with local regulations.

---

## 14. Transport Information

IATA

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |
| Hazard class         | none                                                                |
| Subsidiary Class     | none                                                                |
| Packing group        | none                                                                |
| UN-No                | none                                                                |

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## 15. Regulatory Information

|                           |          |
|---------------------------|----------|
| International Inventories | Complies |
|---------------------------|----------|

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## 16. Other Information

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**End of Safety Data Sheet**

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# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

|                 |                                            |
|-----------------|--------------------------------------------|
| Product Name    | Genomic Spin Columns with Collection Tubes |
| Cat. No.        | GA101-15                                   |
| Company         | TransGen Biotech Co., Ltd.                 |
| Technical Phone | +86-400-898-0321                           |
| Fax             | +86-10-57815011                            |
| E-mail Address  | trans@transgen.com.cn                      |

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## 2. Hazards Identification

Not hazardous

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## 3. Composition

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

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## 4. First Aid Measures

|                    |                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| General advice     | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).                  |
| Eye contact        | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.             |
| Skin contact       | Wash off immediately with plenty of water for at least 15 minutes.                                                               |
| Inhalation         | Move to fresh air.                                                                                                               |
| Ingestion          | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Not an expected route of exposure. |
| Notes to physician | Treat symptomatically.                                                                                                           |

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## 5. Fire-Fighting Measures

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Suitable extinguishing media                  | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective suit.       |

---

## 6. Accidental Release Measures

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Personal precautions      | Use personal protective equipment.                    |
| Methods for cleaning up   | Soak up with inert absorbent material.                |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |

---

## 7. Handling and Storage

|                               |                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. |
| Conditions for safe storage   | Keep in a dry, cool and well-ventilated place.                                                                     |

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## 8. Exposure Controls/Personal Protection

Exposure limits: We are not aware of any national exposure limit.

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## 9. Physical and Chemical Properties

General Information

|                   |                           |
|-------------------|---------------------------|
| Form:             | Solid                     |
| Water solubility: | N/A                       |
| Others:           | No information available. |

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## 10. Stability and Reactivity

|                         |                                |
|-------------------------|--------------------------------|
| Stability               | Stable under normal conditions |
| Materials to avoid      | Strong oxidizing agents        |
| Hazardous decomposition | no data available              |

---

## 11. Toxicological Information

Acute toxicity - No information available.

---

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## Principle Routes of Exposure/ Potential

### Health effects

|                       |                                                    |
|-----------------------|----------------------------------------------------|
| Eyes                  | May cause eye irritation with susceptible persons. |
| Skin                  | May cause skin irritation in susceptible persons.  |
| Inhalation            | May be harmful by inhalation.                      |
| Ingestion             | May be harmful if swallowed.                       |
| Carcinogenic effects  | No information available.                          |
| Mutagenic effects     | No information available.                          |
| Reproductive toxicity | No information available.                          |
| Sensitization         | No information available.                          |

---

## 12. Ecological Information

|                     |                           |
|---------------------|---------------------------|
| Ecotoxicity effects | No information available. |
| Mobility            | No information available. |
| Biodegradation      | No information available. |
| Bioaccumulation     | No information available. |

---

## 13. Disposal Considerations

Dispose of in accordance with local regulations.

---

## 14. Transport Information

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| IATA                 | Not dangerous goods                                                 |
| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |
| Hazard class         | none                                                                |
| Subsidiary Class     | none                                                                |
| Packing group        | none                                                                |
| UN-No                | none                                                                |

---

## 15. Regulatory Information

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## 16. Other Information

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**End of Safety Data Sheet**