

# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

Product Name      *ProteinExt*<sup>TM</sup> Mammalian Membrane Protein Extraction Kit

Cat. No.            DE301

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:

Membrane Protein Extraction Buffer I ( MPEB I )

Membrane Protein Extraction Buffer II ( MPEB II )

Membrane Protein Extraction Buffer III ( MPEB III )

*ProteinSafe*<sup>TM</sup> Protease Inhibitor Cocktail, EDTA-free (100×)

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# Material Safety Data Sheet

Revision Date: 1-June-2016



## 1. Product and Company Information

Product Name	Membrane Protein Extraction Buffer I ( MPEB I )
Cat. No.	DE301-0101
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 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/

Non-hazardous

Components

Phosphate-buffered saline (10%)

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## 3 HAZARDS IDENTIFICATION

Physical/chemical

Hazards	The products contain no substances which at their given concentration are considered to be hazardous to human.
Potential health effects	Not available
Eyes	Not available
Skin	Not available
Inhalation	Not available
Ingestion	Not available
Other Toxic Effects on Humans	Not available
Carcinogenic effects	Not available
Mutagenic effects	Not available

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Reproduction toxicity    Not available

Teratogenic effects        Not available

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#### **4 FIRST AID MEASURE**

Inhalation        If inhaled, remove to fresh air. If breathing is difficult, give oxygen and seek medical attention.

Ingestion        Do not induce vomiting unless directed to do so by medical personal. If large quantities of this material are swallowed, call a physician immediately.

Skin contact    In case of contact, immediately flush the skin with plenty of water. Remove contaminated clothes and shoes.

Eye contact     In case of contact, immediately flush eyes with plenty of water for at least 15 min. get medical attention.

Aggravating condition    Prolonged exposure is not known for aggravate medical condition.

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#### **5 FIRE FIGHTING MEASURES**

Flammability                May be combustible at high temperature.

Extinguishing media  
Suitable                      Use dry chemical for small fire, for large fire, use water spray, fog or foam. Do not use water jet.

Hazardous  
Decomposition              These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides etc.

Fire-fighting procedure    Fire fighter should wear positive pressure self-contained breathing. Apparatus and full turnout gear.

Protecting of fire-fighters    Be sure to use approved/certified respirator or equipment

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#### **6 ACCIDENTAL RELEASE MEASURE**

Personal Precautions        Splash goggles, full suit, boots and gloves. Consult a specialist.

Spill and leak                Use appropriate tools to put the spilled solid in a convenient waste disposal container.

#### **7 HANDLING AND STORAGE**

Handling                      Keep away from heat and source of ignition. Empty containers pose a fire risk.

Storage                        Keep container tightly closed and store at room temperature.

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## 8 EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures	Use process enclosure, local exhaust ventilation, or other Engineering controls to keep airborne level recommended limits.
Hygiene measures	Wash hands after handling the materials.
Personal protective Equipment	
Skin and body	Lab coat Safety glasses
Eyes	Safety glasses

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Color	Not available
Molecular Weight	Not available
Solubility	Not available
Flash point	Not available
Explosive properties	Not available

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## 10 STABILITY AND REACTIVITY

Stability	The product is stable
Conditions to avoid	Not available
Products of hazardous Decomposition	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides etc.

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## 11 TOXICOLOGICAL INFORMATION

RTECS #	N/A
Local effects	
Skin irritation	Not available
Acute toxicity	LD50 and LC50: Not available
Chronic toxicity	Repeated or prolonged exposure is not known for aggravate medical condition.
Other Toxic Effects on humans	Not available
Carcinogenic effects	Not available
Mutagenic effects	Not available
Reproduction toxicity	Not available
Teratogenic effects	Not available

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## 12 ECOLOGICAL INFORMATION

Ecotoxicity	Not available
Toxicity of product	

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of biodegradation	The product itself and its degradation products are not toxic.
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### **13 DISPOSAL CONSIDERATIONS**

Methods of disposal	Waste must be disposed of in accordance with federal, state, and local control regulations.
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### **14 TRANSPORT INFORMATION IATA**

Proper shipping name	Not classified as dangerous in the meaning of transport regulations.
Hazard class	Not available
Subsidiary class	Not available
Packing group	Not available
Un-no	Not available

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### **15 REGULATORY INFORMATION**

EU regulation	
Risk phrases	This product is not classified according to the EU regulation.
U.S. Federal Regulations	This product is not regulated by SARA 313 This product does not contain HAPs.
HCS Classification	Not-controlled under the HCS (United States)
State regulations	
California Proposition 65	This product does not contain chemicals listed under proposition 65
WHMIS (Canada)	Non-controlled

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### **16 OTHER INFORMATION**

This product is sold for research use only. It is not intended for human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household or cosmetic use. A technically competent individual must supervise the use of this product. The above product information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information is to be used as a guide and shall not be taken as being all inclusive. All materials and mixtures may be present unknown hazards and should be used with caution. Since Invent Biotechnologies Inc. cannot control the actual methods or conditions of use, the company shall not held responsible for any damages or losses resulting from contact with the product described herein. The information in this msds does not constitute a warranty, express or implied, including any implied warranty of merchantability or fitness for any particular purpose.

**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	Membrane Protein Extraction Buffer II ( MPEB II )
Cat. No.	DE301-0102
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 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/

Non-hazardous

Components

Phosphate-buffered saline (10%)

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## 3 HAZARDS IDENTIFICATION

Physical/chemical

Hazards	The products contain no substances which at their given concentration are considered to be hazardous to human.
Potential health effects	Not available
Eyes	Not available
Skin	Not available
Inhalation	Not available
Ingestion	Not available
Other Toxic Effects on Humans	Not available
Carcinogenic effects	Not available
Mutagenic effects	Not available

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Reproduction toxicity    Not available

Teratogenic effects        Not available

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#### **4 FIRST AID MEASURE**

Inhalation        If inhaled, remove to fresh air. If breathing is difficult, give oxygen and seek medical attention.

Ingestion        Do not induce vomiting unless directed to do so by medical personal. If large quantities of this material are swallowed, call a physician immediately.

Skin contact    In case of contact, immediately flush the skin with plenty of water. Remove contaminated clothes and shoes.

Eye contact     In case of contact, immediately flush eyes with plenty of water for at least 15 min. get medical attention.

Aggravating condition    Prolonged exposure is not known for aggravate medical condition.

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#### **5 FIRE FIGHTING MEASURES**

Flammability                May be combustibile at high temperature.

Extinguishing media  
Suitable                      Use dry chemical for small fire, for large fire, use water spray, fog or foam. Do not use water jet.

Hazardous  
Decomposition              These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides etc.

Fire-fighting procedure    Fire fighter should ware positive pressure self-contained breathing. Apparatus and full turnout gear.

Protecting of fire-fighters    Be sure to use approved/certified respirator or equipment

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#### **6 ACCIDENTAL RELEASE MEASURE**

Personal Precautions        Splash goggles, full suit, boots and gloves. Consult a specialist.

Spill and leak                Use appropriate tools to put the spilled solid in a convenient waste disposal container.

#### **7 HANDLING AND STORAGE**

Handling                      Keep away from heat and source of ignition.  
Empty containers pose a fire risk.

Storage                        Keep container tightly closed and store at room temperature.

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## 8 EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures	Use process enclosure, local exhaust ventilation, or other Engineering controls to keep airborne level recommended limits.
Hygiene measures	Wash hands after handling the materials.
Personal protective Equipment	
Skin and body	Lab coat Safety glasses
Eyes	Safety glasses

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Color	Not available
Molecular Weight	Not available
Solubility	Not available
Flash point	Not available
Explosive properties	Not available

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## 10 STABILITY AND REACTIVITY

Stability	The product is stable
Conditions to avoid	Not available
Products of hazardous Decomposition	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides etc.

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## 11 TOXICOLOGICAL INFORMATION

RTECS #	N/A
Local effects	
Skin irritation	Not available
Acute toxicity	LD50 and LC50: Not available
Chronic toxicity	Repeated or prolonged exposure is not known for aggravate medical condition.
Other Toxic Effects on humans	Not available
Carcinogenic effects	Not available
Mutagenic effects	Not available
Reproduction toxicity	Not available
Teratogenic effects	Not available

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## 12 ECOLOGICAL INFORMATION

Ecotoxicity	Not available
Toxicity of product	

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of biodegradation	The product itself and its degradation products are not toxic.
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### **13 DISPOSAL CONSIDERATIONS**

Methods of disposal	Waste must be disposed of in accordance with federal, state, and local control regulations.
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### **14 TRANSPORT INFORMATION IATA**

Proper shipping name	Not classified as dangerous in the meaning of transport regulations.
Hazard class	Not available
Subsidiary class	Not available
Packing group	Not available
Un-no	Not available

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### **15 REGULATORY INFORMATION**

EU regulation	
Risk phrases	This product is not classified according to the EU regulation.
U.S. Federal Regulations	This product is not regulated by SARA 313 This product does not contain HAPs.
HCS Classification	Not-controlled under the HCS (United States)
State regulations	
California Proposition 65	This product does not contain chemicals listed under proposition 65
WHMIS (Canada)	Non-controlled

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### **16 OTHER INFORMATION**

This product is sold for research use only. It is not intended for human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household or cosmetic use. A technically competent individual must supervise the use of this product. The above product information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information is to be used as a guide and shall not be taken as being all inclusive. All materials and mixtures may be present unknown hazards and should be used with caution. Since Invent Biotechnologies Inc. cannot control the actual methods or conditions of use, the company shall not held responsible for any damages or losses resulting from contact with the product described herein. The information in this msds does not constitute a warranty, express or implied, including any implied warranty of merchantability or fitness for any particular purpose.

**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	Membrane Protein Extraction Buffer III ( MPEB III )
Cat. No.	DE301-0103
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 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/

Non-hazardous

Components

Phosphate-buffered saline (10%)

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## 3 HAZARDS IDENTIFICATION

Physical/chemical

Hazards	The products contain no substances which at their given concentration are considered to be hazardous to human.
Potential health effects	Not available
Eyes	Not available
Skin	Not available
Inhalation	Not available
Ingestion	Not available
Other Toxic Effects on Humans	Not available
Carcinogenic effects	Not available
Mutagenic effects	Not available

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Reproduction toxicity    Not available

Teratogenic effects        Not available

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#### **4 FIRST AID MEASURE**

Inhalation        If inhaled, remove to fresh air. If breathing is difficult, give oxygen and seek medical attention.

Ingestion        Do not induce vomiting unless directed to do so by medical personal. If large quantities of this material are swallowed, call a physician immediately.

Skin contact    In case of contact, immediately flush the skin with plenty of water. Remove contaminated clothes and shoes.

Eye contact     In case of contact, immediately flush eyes with plenty of water for at least 15 min. get medical attention.

Aggravating condition    Prolonged exposure is not known for aggravate medical condition.

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#### **5 FIRE FIGHTING MEASURES**

Flammability                May be combustible at high temperature.

Extinguishing media  
Suitable                      Use dry chemical for small fire, for large fire, use water spray, fog or foam. Do not use water jet.

Hazardous  
Decomposition              These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides etc.

Fire-fighting procedure    Fire fighter should wear positive pressure self-contained breathing. Apparatus and full turnout gear.

Protecting of fire-fighters    Be sure to use approved/certified respirator or equipment

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#### **6 ACCIDENTAL RELEASE MEASURE**

Personal Precautions        Splash goggles, full suit, boots and gloves. Consult a specialist.

Spill and leak                Use appropriate tools to put the spilled solid in a convenient waste disposal container.

#### **7 HANDLING AND STORAGE**

Handling                      Keep away from heat and source of ignition. Empty containers pose a fire risk.

Storage                        Keep container tightly closed and store at room temperature.

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## 8 EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures	Use process enclosure, local exhaust ventilation, or other Engineering controls to keep airborne level recommended limits.
Hygiene measures	Wash hands after handling the materials.
Personal protective Equipment	
Skin and body	Lab coat Safety glasses
Eyes	Safety glasses

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Color	Not available
Molecular Weight	Not available
Solubility	Not available
Flash point	Not available
Explosive properties	Not available

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## 10 STABILITY AND REACTIVITY

Stability	The product is stable
Conditions to avoid	Not available
Products of hazardous Decomposition	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides etc.

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## 11 TOXICOLOGICAL INFORMATION

RTECS #	N/A
Local effects	
Skin irritation	Not available
Acute toxicity	LD50 and LC50: Not available
Chronic toxicity	Repeated or prolonged exposure is not known for aggravate medical condition.
Other Toxic Effects on humans	Not available
Carcinogenic effects	Not available
Mutagenic effects	Not available
Reproduction toxicity	Not available
Teratogenic effects	Not available

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## 12 ECOLOGICAL INFORMATION

Ecotoxicity	Not available
Toxicity of product	

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of biodegradation	The product itself and its degradation products are not toxic.
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### **13 DISPOSAL CONSIDERATIONS**

Methods of disposal	Waste must be disposed of in accordance with federal, state, and local control regulations.
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### **14 TRANSPORT INFORMATION IATA**

Proper shipping name	Not classified as dangerous in the meaning of transport regulations.
Hazard class	Not available
Subsidiary class	Not available
Packing group	Not available
Un-no	Not available

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### **15 REGULATORY INFORMATION**

EU regulation	
Risk phrases	This product is not classified according to the EU regulation.
U.S. Federal Regulations	This product is not regulated by SARA 313 This product does not contain HAPs.
HCS Classification	Not-controlled under the HCS (United States)
State regulations	
California Proposition 65	This product does not contain chemicals listed under proposition 65
WHMIS (Canada)	Non-controlled

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### **16 OTHER INFORMATION**

This product is sold for research use only. It is not intended for human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household or cosmetic use. A technically competent individual must supervise the use of this product. The above product information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information is to be used as a guide and shall not be taken as being all inclusive. All materials and mixtures may be present unknown hazards and should be used with caution. Since Invent Biotechnologies Inc. cannot control the actual methods or conditions of use, the company shall not held responsible for any damages or losses resulting from contact with the product described herein. The information in this msds does not constitute a warranty, express or implied, including any implied warranty of merchantability or fitness for any particular purpose.

**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                    *ProteinSafe*<sup>TM</sup> Protease Inhibitor Cocktail, EDTA-free (100×)  
Cat. No.                            DI101-02  
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

Respiratory sensitisation	Category 1
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Hazard statements: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements:

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

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

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

P284 - Wear respiratory protection

### 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.

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### 3. Composition

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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

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in properly labeled containers

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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

Stability Stable under normal conditions

Materials to avoid No information available

Polymerization None under normal processing.

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## 11. Toxicological Information

Acute toxicity Not hazardous

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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 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 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 WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE

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**End of Safety Data Sheet**