

\*\*\*\* SAFETY DATA SHEET \*\*\*\*

Creation Date 2-Aug-2017  
Revision Date 22-Jun-2022  
Revision Number 3

Product name : TANBead Nucleic Acid Extraction Kit

| Reference No.          | Description           |
|------------------------|-----------------------|
| 612A46/M612A46/W612A46 | Tissue DNA Auto Plate |
| 612S46/M612S46/W612S66 | Tissue DNA Auto Tube  |

1. Identification of substance

Production details

Trade name: Lysis Buffer

Manufacturer/Supplier:

Taiwan Advanced Nanotech Inc.

6F., No.188, Wenhe Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)

Tel.:886-3-3167568

MSDS-No.: LB-612 series

2. Hazards Identification

Hazard description:

Classification of the substance or mixture :



Label elements

**GHS label elements** : The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms** : GHS05, GHS07, GHS08

**Information pertaining to particular dangers for man and environment:**

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Harmful by inhalation, in contact with skin and if swallowed.

Irritating to eyes and skin.

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3. Composition/Data on components

Chemical characterization



Taiwan  
Advanced  
Nanotech

**Description:** Liquid (Proprietary Compound Mixture)

**Dangerous components:**

593-84-0 guanidinium thiocyanate < 50%

**4. First aid measures**

**General information:**

Symptoms of poisoning may be even occur several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

**After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Immediately call a doctor.

**5. Fire fighting measures**

**Suitable extinguishing agents:**

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

**Protective equipment:**

Mount respiratory protective device.

**6. Accidental release measures**

**Person-related safety precautions:**

Ensure adequate ventilation.

**Measures for environmental protection:**

Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/ collecting:**

Ensure adequate ventilation.

Dispose contaminated material as according to item 13.

**7. Handling and storage**

**Handling:**

**Information for safe handling:**

Keep receptacles tightly sealed.

**Information about protection against explosions and fires:**

No special measures required.



**Storage:**

**Requirements to be met by storerooms and receptacles:**

No special measures required.

**Information about storage in one common storage facility:**

Not required.

**Further information about storage conditions:**

Keep receptacle tightly sealed.

**8. Exposure controls and personal protection**

**Additional information about design of technical systems:**

No further data; see item 7.

**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 the eyes and skin.

**Breathing equipment:**

Not required.

**Protection of hands:**

Protective gloves.

**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further markers of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles.

**9. Physical and chemical properties**

**General Information**

**Form:** Fluid

**Color:** Colorless

**Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

**Flash point:** Not applicable.

**Auto igniting:** Product is not self-igniting.



**Danger of explosion:** Product does not present an explosion hazard.

**Density:** No data available

**Solubility in / Miscibility with water:** Fully miscible.

**10. Stability and reactivity:**

**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**Dangerous reactions:**

React with acids, alkalis and oxidizing agents.

**Dangerous products of decomposition:**

Carbon monoxide and carbon dioxide.

Nitrogen oxides (NO<sub>x</sub>)

Sulphur oxides (SO<sub>x</sub>)

**11. Toxicological information**

**Acute toxicity:**

**Primary irritant effect:**

**On the skin:** Irritant to skin and mucous membranes.

**On the eye:**

Irritating effect.

**Sensitization:**

No sensitizing effects known.

**Additional toxicological information:**

The product shows the following dangers according to internally calculation methods for preparations.

Harmful

Irritant

**12. Ecological information**

**General notes:**

Water hazard class 1 (Self-assessment): 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**

**Product:**

**Recommendation:**

Do not dispose of together with household garbage. Do not allow products to reach sewage system.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.



**Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14. DOT regulations:**

**Land transport ADR/RID (Cross-border):**

**ADR/RID class:** No classification assigned.

**Maritime transport IMDG:**

**IMDG class:** No classification assigned.

**Marine pollutant:** No

**Air transport ICAO-TI / IATA-DGR:**

**ICAO / IATA class:** Not restricted by IATA.

**15. Regulatory information**

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

**16. Other information**

If you want further information, please contact TANBead sales representative  
(Tel : +886-3-3167568)



\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

1. Identification of substance

**Production details**

**Trade name: Washing Buffer 1**

**Manufacturer/Supplier:**

Taiwan Advanced Nanotech Inc.

6F., No.188, Wenhe Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)

Tel.:886-3-3167568

**MSDS-No.:** WB1-612 series

2. Hazards Identification

**Hazard description:**

**Classification of the substance or mixture :**



**Label elements**

**GHS label elements :** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms :** GHS05, GHS07, GHS08

**Information pertaining to particular dangers for man and environment:**

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Harmful by inhalation, in contact with skin and if swallowed.

Irritating to eyes and skin.

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3. Composition/Data on components

**Chemical characterization**

**Description:** Liquid (Proprietary Compound Mixture)

**Dangerous components:**

593-84-0 guanidinium thiocyanate < 42%



#### 4. First and measures

##### **General information:**

Symptoms of poisoning may be even occur several hours; therefore medical observation for at least 48 hours after the accident.

##### **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

##### **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

##### **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

##### **After swallowing:**

Immediately call a doctor.

#### 5. Fire fighting measures

##### **Suitable extinguishing agents:**

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

##### **Protective equipment:**

Mount respiratory protective device.

#### 6. Accidental release measures

##### **Person-related safety precautions:**

Ensure adequate ventilation.

##### **Measures for environmental protection:**

Do not allow to enter sewers/ surface or ground water.

##### **Measures for cleaning/ collecting:**

Ensure adequate ventilation.

Dispose contaminated material as according to item 13.

#### 7. Handling and storage

##### **Handling:**

##### **Information for safe handling:**

Keep receptacles tightly sealed.

##### **Information about protection against explosions and fires:**

No special measures required.

##### **Storage:**

##### **Requirements to be met by storerooms and receptacles:**

No special measures required.

##### **Information about storage in one common storage facility:**

Not required.



**Further information about storage conditions:**

Keep receptacle tightly sealed.

**8. Exposure controls and personal protection**

**Additional information about design of technical systems:**

No further data; see item 7.

**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 the eyes and skin.

**Breathing equipment:**

Not required.

**Protection of hands:**

Protective gloves.

**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further markers of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:**

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles.

**9. Physical and chemical properties**

**General Information**

**Form:** Fluid

**Color:** Colorless

**Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

**Flash point:** Not applicable.

**Auto igniting:** Product is not self-igniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Density:** No data available

**Solubility in / Miscibility with water:** Fully miscible.





## 10. Stability and reactivity:

### **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

### **Dangerous reactions:**

React with acids, alkalis and oxidizing agents.

### **Dangerous products of decomposition:**

Carbon monoxide and carbon dioxide.

Nitrogen oxides (NO<sub>x</sub>)

Sulphur oxides (SO<sub>x</sub>)

## 11. Toxicological information

### **Acute toxicity:**

### **Primary irritant effect:**

**On the skin:** Irritant to skin and mucous membranes.

### **On the eye:**

Irritating effect.

### **Sensitization:**

No sensitizing effects known.

### **Additional toxicological information:**

The product shows the following dangers according to internally calculation methods for preparations.

Harmful

Irritant

## 12. Ecological information

### **General notes:**

Water hazard class 1 (Self-assessment): 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

### **Product:**

### **Recommendation:**

Do not dispose of together with household garbage. Do not allow products to reach sewage system.

### **Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.



**14. DOT regulations:**

**Land transport ADR/RID (Cross-border):**

**ADR/RID class:** No classification assigned.

**Maritime transport IMDG:**

**IMDG class:** No classification assigned.

**Marine pollutant:** No

**Air transport ICAO-TI / IATA-DGR:**

**ICAO / IATA class:** Not restricted by IATA.

**15. Regulatory information**

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

**16. Other information**

If you want further information, please contact TANBead sales representative  
(Tel : +886-3-3167568)



\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

1. Identification of substance

Production details

Trade name: Magnetic Beads

Manufacturer/Supplier:

Taiwan Advanced Nanotech Inc.

6F., No.188, Wenhe Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)

Tel.:886-3-3167568

MSDS-No.: B207

2. Hazards Identification

Hazard description:

Classification of the substance or mixture :



Label elements

GHS label elements : The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms : GHS05, GHS07, GHS08

Information pertaining to particular dangers for man and environment: Not applicable.

NFPA rating (scale 0-4)

Health = 0

Fire = 0

Reactivity = 0

WHMIS-rating (scale 0-4)

Health = 0

Fire = 0

Reactivity = 0

3. Composition/Data on components

Chemical characterization

Description: Liquid (Proprietary Compound Mixture)

Dangerous components: Void

4. First and measures

After inhalation: Supply fresh air; consult doctor in case of complaints.



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

**After skin contact:** Immediately wash with water and soap and rinse thoroughly..

**After swallowing:** Immediately call a doctor.

## 5. Fire fighting measures

**Suitable extinguishing agents:**

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

**Protective equipment:** Do not inhale explosion gases or combustion gases.

## 6. Accidental release measures

**Person-related safety precautions:** Ensure adequate ventilation.

**Measures for environmental protection:**

Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/ collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

## 7. Handling and storage

**Handling:**

**Information for safe handling:** Keep receptacles tightly sealed.

**Information about protection against explosions and fires:** No special measures required.

**Storage:**

**Requirements to be met by storerooms and receptacles:** No special measures required.

**Information about storage in one common storage facility:** not required.

**Further information about storage conditions:** None.

## 8. Exposure controls and personal protection

**Additional information about design of technical systems:**

No further data; see item 7.

**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 the eyes and skin.

**Breathing equipment:**

Not required.

**Protection of hands:**

Protective gloves.



**Eye protection:**

Tightly sealed goggles.

**9. Physical and chemical properties**

**General Information**

**Form:** Suspension

**Color:** Black

**Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 100°C (212°F)

**Flash point:** Not applicable.

**Auto igniting:** Product is not self-igniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Density at 20°C (68°F):** not determined.

**Solubility in / Miscibility with water:** Fully miscible.

**pH-value at 20°C (68°F):** 8~9

**10. Stability and reactivity:**

**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**Dangerous reactions:** Reacts with acids, alkalis and oxidizing agents.

**Dangerous products of decomposition:** Danger of toxic pyrolysis products.

**11. Toxicological information**

**Acute toxicity:**

**Primary irritant effect:**

**On the skin:** Irritant to skin and mucous membranes.

**On the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

The product is not subject to classification according to internally calculation methods for preparations.

**12. Ecological information**

**General notes:**

Water hazard class 1 (Self-assessment): 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**

**Product:**



**Recommendation:**

Do not dispose of together with household garbage. Do not allow products to reach sewage system.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14. DOT regulations:**

**Land transport ADR/RID (Cross-border):**

**ADR/RID class:** No classification assigned.

**Maritime transport IMDG:**

**IMDG class:** No classification assigned.

**Marine pollutant:** No

**Air transport ICAO-TI / IATA-DGR:**

**ICAO / IATA class:** Not restricted by IATA.

**15. Regulatory information**

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

**16. Other information**

If you want further information, please contact TANBead sales representative  
(Tel : +886-3-3167568)



\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

1. Identification of substance

**Production details**

**Trade name:** Washing Buffer 2

**Manufacturer/Supplier:**

Taiwan Advanced Nanotech Inc.

6F., No.188, Wenhe Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)

Tel.:886-3-3167568

**MSDS-No.:** WB2-612 series

2. Hazards Identification

**Classification of the substance or mixture :**

The product is not classified as a hazardous substance or mixture according to the Globally Harmonized System (GHS).

**Label elements :**

**GHS label elements :** Void

**Hazard pictograms :** Void

**Signal word :** Void

**Hazard statements :** Void

**Classification system :**

**NFPA rating (scale 0-4)**

Health = 0

Fire = 0

Reactivity = 0

**WHMIS-rating (scale 0-4)**

Health = 0

Fire = 0

Reactivity = 0

**OSHA Hazard Overview (Criteria according to 29CFR1910.1200) :** NA

**Target Organ(s) :** NA or unknown

**Other hazards :**

This mixture has not been tested to determine the overall health hazard; therefore, in accordance with 29CFR1910.1200, the data reported above pertains to the hazardous ingredients of this mixture.

3. Composition/Data on components

**Chemical characterization :** Mixtures

**Description :** The mixture of nonhazardous substance concentrations are unlisted due to the trade secret of TANBead.



**Dangerous components :** Void

**4. First-aid measures**

**General information :** No special measure required.

**After inhalation :** Supply fresh air; consult a doctor in case of complaints.

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

**After skin contact :** Immediately wash with water and soap and rinse thoroughly.

**After swallowing :** Immediately call a doctor.

**5. Firefighting measures**

**Suitable extinguishing agents :**

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

**Protective equipment :** Do not inhale explosion gases or combustion gases.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures :**

Ensure adequate ventilation.

**Measures for environmental protection :**

Dilute with plenty of water.

**Measures for cleaning/ collecting :**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**7. Handling and storage**

**Handling**

**Information for safe handling :** Keep receptacles tightly sealed.

**Information about protection against explosions and fires :** No special measures required.

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

**Storage :**

**Requirements to be met by storerooms and receptacles :** No special measures required.

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

**Further information about storage conditions :** Keep receptacles tightly sealed.

**8. Exposure controls and personal protection**

**Additional information about design of technical systems :** No further data.

**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.





**Breathing equipment :**

Not required.

**Protection of hands :**

Protective gloves.

**Eye protection :**

Tightly sealed glasses.

**9. Physical and chemical properties**

**General Information**

**Form :** Fluid

**Color :** Colorless

**Odor :** Not determined.

**Change in condition**

**Melting point/ Melting range :** 0°C (32°F)

**Boiling point/ Boiling range :** 100°C (212°F)

**Flash point :** Not applicable.

**Flammability (solid, gaseous) :** Not applicable.

**Auto igniting :** Product is not self-igniting.

**Danger of explosion :** Product does not present an explosion hazard.

**Upper explosion limit / Upper flammability limit :** Not determined.

**Lower explosion limit / Lower flammability limit :** Not determined.

**Vapour pressure :** Not determined.

**Relative vapour density :** Not determined.

**Relative density :** Not determined.

**Density at 20°C (68°F) :** Not determined.

**Solubility in / Miscibility with water :** Fully miscible.

**Partition coefficient (n-octanol/water) :** Not determined.

**Viscosity**

**Dynamic :** Not determined.

**Kinematic :** Not determined.

**Water :** 80%

**VOC content :** 0%

**pH-value at 20°C (68°F) :** 8.5

**10. Stability and reactivity**

**Reactivity :** No further relevant information available.

**Chemical stability**

**Thermal decomposition / conditions to be avoided :**

No decomposition if used according to specifications.



**Dangerous reactions :** Reacts with strong acids, alkalis and oxidizing agents.

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

**Incompatible materials :** Oxidizing agents

**Dangerous products of decomposition :** Danger of toxic pyrolysis products.

## 11. Toxicological information

### Acute toxicity

**LD/LC50 values that are relevant for classification :** No data available.

### Primary irritant effect

**On the skin :** Irritant to skin and mucous membranes.

**On the eye :** Irritating effect.

**Sensitization :** No sensitizing effects known.

### Additional toxicological information :

The product is not subject to classification according to internally calculation methods for preparations.

## 12. Ecological information

### Toxicity

**Aquatic toxicity :** Not harmful to the aquatic environment.

**Persistence and degradability :** Not available.

### Behavior in environmental systems

**Bioaccumulative potential :** Not known.

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

### Ecotoxicological effects

**Remark :** Not available.

### Additional ecological information

**General notes :** Water hazard class 1 (Self-assessment): 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

### Waste treatment methods

#### Recommendation :

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Uncleaned packagings :

#### Recommendation :

Disposal must be made according to official regulations.

#### Recommended cleansing agent :

Water, if necessary with cleansing agents.



**14. Transportation Information:**

**UN number** : Not regulated as a dangerous good

**UN proper shipping name** : Not regulated as a dangerous good

**Transport hazard class(es)** : Not regulated as a dangerous good

**Packing group** : Not regulated as a dangerous good

**Environmental hazards** : Not regulated as a dangerous good

**Special precautions for user Remarks** : Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

**15. Regulatory information**

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

**16. Other information**

If you want further information, please contact TANBead sales representative.

(Tel: +886-3-3167568)



\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

**1. Identification of substance**

**Production details**

**Trade name:** Elution Buffer

**Manufacturer/Supplier:**

Taiwan Advanced Nanotech Inc.

6F., No.188, Wenhe Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)

Tel.:886-3-3167568

**MSDS-No.:** EB-612 series

**2. Hazards Identification**

**Hazard description:** Not applicable.

**Information pertaining to particular dangers for man and environment:** Not applicable.

**NFPA rating (scale 0-4)**

Health = 0

Fire = 0

Reactivity = 0

**WHMIS-rating (scale 0-4)**

Health = 0

Fire = 0

Reactivity = 0

**3. Composition/Data on components**

**Chemical characterization**

**Description:** Liquid (Proprietary Compound Mixture)

**Dangerous components:** Void

**4. First and measures**

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

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

**After swallowing:** Immediately call a doctor.

**5. Fire fighting measures**

**Suitable extinguishing agents:**

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

**Protective equipment:**

Do not inhale explosion gases or combustion gases.



## 6. Accidental release measures

**Person-related safety precautions:** Ensure adequate ventilation.

**Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/ collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

## 7. Handling and storage

**Handling:**

**Information for safe handling:** Keep receptacles tightly sealed.

**Information about protection against explosions and fires:** No special measures required.

**Storage:**

**Requirements to be met by storerooms and receptacles:** No special measures required.

**Information about storage in one common storage facility:** not required.

**Further information about storage conditions:** None.

## 8. Exposure controls and personal protection

**Additional information about design of technical systems:**

No further data; see item 7.

**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 the eyes and skin.

**Breathing equipment:**

Not required.

**Protection of hands:**

Protective gloves.

**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further markers of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles.



## 9. Physical and chemical properties

### General Information

**Form:** Fluid

**Color:** Colorless

### Change in condition

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 100°C (212°F)

**Flash point:** Not applicable.

**Auto igniting:** Product is not self-igniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Density at 20°C (68°F):** 1.0 g/cm<sup>3</sup>

**Solubility in / Miscibility with water:** Fully miscible.

**pH-value at 20°C (68°F):** 8

## 10. Stability and reactivity:

### Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

**Dangerous reactions:** Reacts with acids, alkalis and oxidizing agents.

**Dangerous products of decomposition:** Danger of toxic pyrolysis products.

## 11. Toxicological information

### Acute toxicity:

### Primary irritant effect:

**On the skin:** Irritant to skin and mucous membranes.

**On the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

### Additional toxicological information:

The product is not subject to classification according to internally calculation methods for preparations.

## 12. Ecological information

### General notes:

Water hazard class 1 (Self-assessment): 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

### Product:

### Recommendation:

Do not dispose of together with household garbage. Do not allow products to reach sewage system.



**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14. DOT regulations:**

**Land transport ADR/RID (Cross-border):**

**ADR/RID class:** No classification assigned.

**Maritime transport IMDG:**

**IMDG class:** No classification assigned.

**Marine pollutant:** No

**Air transport ICAO-TI / IATA-DGR:**

**ICAO / IATA class:** Not restricted by IATA.

**15. Regulatory information**

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

**16. Other information**

If you want further information, please contact TANBead sales representative  
(Tel : +886-3-3167568)

