



## 100bp DNA Ladder H3 RTU (Ready-to-Use)

### Identification of the preparation / Substance and of the company

Product Name : 100bp DNA Ladder H3 RTU

Catalog Number : DM003-R500

Use of the preparation : For laboratory use.

Suitable for use as molecular weight standards for SDS-PAGE electrophoresis.

Company identification : BIO-HELIX Co.,LTD.

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### Composition / Information on ingredients

Ingredients :

|       |             |              |               |
|-------|-------------|--------------|---------------|
| Water | > 50% (v/v) | EC#231-791-2 | CAS#7732-18-5 |
|-------|-------------|--------------|---------------|

|          |              |              |             |
|----------|--------------|--------------|-------------|
| Glycerol | 10-25% (v/v) | EC#200-289-5 | CAS#56-81-5 |
|----------|--------------|--------------|-------------|

Other components :

Components not listed here are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1999/45/EC.

Additional information : For the wording of the listed risk phrases refer to section 16.

### Hazards identification

The preparation is not classified as dangerous according to Directive 1999/45/EC or Directive 67/548/EC, and is not labelled with danger symbols or indications of danger.

Hazards deriving from physical-chemical properties :

The data available do not support any physical or chemical hazard.

Human health hazards :

Inappropriate handling may cause formation of aerosols. Inhalation of aerosols may cause allergic type reactions in sensitized individuals. Prolonged skin contact may cause minor irritation.

Caution : Avoid inhalation, ingestion, and skin contacts.

Environmental hazards : The data available do not support any environmental hazard.





## First Aid Measures

### Ingestion :

If swallowed, rinse mouth and throat thoroughly with water. Consult a doctor in event of any complaints.

### Inhalation :

If inhaled, remove victim from area of exposure. If symptoms of irritation or respiratory allergy occur, consult a doctor.

### Skin contact :

Generally, the product does not irritate the skin. If symptoms of irritation after prolonged exposure occur, consult a doctor.

### Eye contact :

In case of contact, wash out opened eyes with plenty of water for several minutes. Consult a doctor in event of any complaints.

## Fire-fighting measures

The preparation cannot cause fire.

Suitable extinguishing agents:

Water spray, Carbon Dioxide, dry chemical powder or appropriate foam.

Not suitable extinguishing agents: None.

Special exposure hazards from decomposition products: Not thoroughly investigated.

Protective equipment: Wear self-contained breathing apparatus and protective clothing.

## Accidental release measures

### Personal precautions :

Wear appropriate gloves (see Section 8), safety glasses to clean small releases/spillage. In case of vapor/aerosol formation, wear suitable respiratory protection means. Ventilate the area.

Environmental precautions : No special measures required.

### Methods for cleaning up :

Absorb spillages with liquid-binding material. Ventilate and wash the area after the spillage is completely removed.

Additional information: No dangerous substances are released.



## Handling and storage

Handling : No further requirements.

Use appropriate personal protection measures (see Section 8). Avoid any contact with the liquid. Avoid the formation of aerosols. Ventilate area.

Storage : Store at - 20°C.

## Exposure controls / personal protection

None other specific requirements relating to the preparation.

Ingredients with limit values that require monitoring at the workplace :

The product does not contain any relevant quantities of materials with critical values that need to be monitored at the workplace.

General protective and hygienic measures :

The usual precautionary measures are the same as for chemicals handling.

Engineering measures :

None specific requirements relating to the preparation.

Personal protection :

- Respiratory protection : No special measures required.
- Hand protection : Wear rubber gloves. None special requirements to rubber.
- Eye protection : No need to wear glasses (goggles) when ordinary operations with the preparation. Safety glasses are recommended during certain operations when aerosol formation is possible.
- Skin protection : The usual precautionary measures accepted in research laboratories, e.g. protective clothes (gowns). None specific requirements.

## Physical and chemical properties

Appearance : Liquid.

Color : Colorless.

Odor : Odorless.

pH-value at 25°C : 8.0.

Boiling point : 100°C.

Flash Point : Not applicable.

Flammability/autoflammability : The preparation is not flammable/self-igniting. Explosive properties: The preparation does not possess explosive properties.

Oxidizing properties : Not applicable.

Vapor pressure : Not applicable.

Relative density at 20°C : ~1 g/cm<sup>3</sup>.





Solubility in/miscibility with water : Fully miscible.

Fat solubility : Not applicable.

Vapor density : Not applicable.

Evaporation rate : Not applicable.

Conductivity : Not applicable.

## Stability and reactivity

Viscosity : Not viscous.

Stability : Stable under storage conditions (see Section 7).

Conditions to avoid : No conditions which may cause dangerous reactions.

Possibility of hazardous reactions : No dangerous reactions known.

Materials to avoid : No materials which may cause dangerous reactions.

Hazardous decomposition products : No dangerous decomposition products known.

Hazardous polymerization : Will not occur.

## Toxicological information

Routes of exposure :

Inhalation : Inhalation of aerosols may cause allergic type reactions in sensitized individuals.

Ingestion : Repeated ingestion or excessive dosage may cause irritation of the gastrointestinal tract.

Skin and eye contact: Generally, the product does not irritate the skin and eyes. Prolonged skin or eye contact may cause minor irritation.

Additional toxicological information :

When used and handled according to specifications, the product does not have any harmful effects. The product is not listed in a priority list as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of the existing substances.

## Ecological information

Ecotoxicity :

The preparation is considered not dangerous to the environment with respect to mobility, persistence and degradability, bioaccumulation, aquatic toxicity and other data relating to ecotoxicity.

Persistence and degradability : The preparation is readily biodegradable.



Bioaccumulative potential :

It is considered that the preparation does not accumulate in biota, and does not pass through the food chain.

Other adverse effects: Not applicable.

## Disposal considerations

The disposal of the product does not present a danger.

## Transport information

No special disposal methods required, except to be in accordance with current local environmental regulations.

Special precautions : None known.

Proper shipping name : Not dangerous goods according to transport regulations.

National transport regulations :

No additional national transport regulations are known to the supplier.

IMDG : Non-hazardous for sea freight.

ADR : Non-hazardous for road transport.

RID : Non-hazardous for rail transport.

ICAO/IATA : Non-hazardous for air transport.

Other information : The preparation may be stored in ice during the transportation.

## Regulatory information

US

Labelling according to US Regulations : Caution: Avoid contact and inhalation.

US Regulatory information : SARA LISTED: No.

EU

Labelling according to EU Guidelines : The preparation is not dangerous within the meaning of Directives 67/548/EC, 1999/45/EC, and 88/379/ECC, and is not labelled with danger symbols or indications of danger.

Canada

WHMIS classification : This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

DSL: No.

NDSL: No.

## Other information

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Bio-Helix Co., Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.

