

## 1Kb Plus DNA Ladder RTU

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

Product Name: 1Kb Plus DNA Ladder RTU

Catalog Number: DM015-R500(N)~DM015-B500ML

Use of the product: For laboratory use. Suitable for use as molecular weight standards for 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 product 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 product 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. None other specific requirements relating to the product.

## Exposure controls / personal protection

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 product.

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 product.

Safety glasses are recommended during certain operations when aerosol formation is possible.

- Skin protection: The usual precautionary measures accepted in research laboratories, e.g.

## Physical and chemical properties

Protective clothes (gowns). None specific requirements.

Appearance: Liquid.

Color: Blue.

Odor: Odorless.

pH-value at 25 °C : 8.0.

Boiling point: 100 °C.

Flash Point: Not applicable.

Flammability/autoflammability: The product is not flammable/self-igniting.

Explosive properties: The product 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.

Viscosity: Not viscous.

## Stability and reactivity

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.

## Toxicological information

Hazardous polymerization: Will not occur.

Routes of exposure: Inhalation : Inhalation of aerosols may cause allergic type reactions in sensitive 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 product 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 product is readily biodegradable.

Bioaccumulative potential: It is considered that the product 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 pose danger.

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

## Transport information

Special precautions: None known.

Proper shipping name: "Non-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.

## Regulatory information

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

US

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

US Regulatory information: SARA LISTED: No.

EU

Labelling according to EU Guidelines: The product 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.