

Material Safety Data Sheet



1. Product and Company Identification

- Product Name: Ecoband 1kb DNA Ladder (0.1 – 3kb)
- Catalog Number: I041201-0500
- Recommended Use:
For laboratory use.
Suitable for use as molecular weight standards for SDS-PAGE.
- **Supplier**
45, Jojeong-daero, Hanam-si, Gyeonggi-do, Misa Centum Biz F226, Ecocell Inc.
Tel : (82) 2-457-2236 Email : sales@ecsci.co.kr
** Emergency Telephone Number : (82) 2-457-2236**

2. 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.

3. 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:

4. 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.

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- Skin Contact:
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.

5. 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.

6. 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

7. 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.

8. Exposure controls / Personal protection

None other specific requirements relating to the product.

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.

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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. protective clothes (gowns). None specific requirements.

9. 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 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 : $\sim 1 \text{ g/cm}^3$.

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.

10. Stability and reactivity

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

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

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Possibility of hazardous reactions: No dangerous reactions known.

Materials to avoid: Strong oxidizing agents, strong bases.

Hazardous decomposition products: No dangerous decomposition products known. Hazardous polymerization: Will not occur.

11. Toxicological Information

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

Ingestion: Repeated ingestion or excessive dosage may be irritating.

Skin and eye contact: Prolonged contact may cause irritation.

Additional toxicological information: When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12. 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.

13. Disposal Considerations

The disposal of the product does not present a danger. No special disposal methods required, except to be in accordance with current local environmental regulations.

14. Transport Information

Special precautions: None known.

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

Transport regulations: No additional 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 product may be stored in ice during the transportation.

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15. 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 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.

16. 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. Ecocell Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.



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