

# Material Safety Data Sheet (MSDS)



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Data updated: 10/02/2019

Product name: AccuRuller 1kb+ DNA Ladder  
Catalog number : 02004-500

## 1.IDENTIFICATION OF THE SUBSTANCE

Application of the substance / the preparation: Laboratory chemicals

Manufacturer/Supplier:

**Maestrogen ,Inc.,**

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## 2.COMPOSITION, INFORMATION ON INGREDIENTS

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

**Glycerol :** 10~25% 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.

## 3.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

**Ingestion:** May be harmful if swallowed.

## **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.

**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.

## **5. 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.

## **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.

None other specific requirements relating to the preparation.

## **8.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 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.

## **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 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.

**Viscosity:** Not viscous.

## **10. STABILITY AND REACTIVITY**

### **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.

## **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 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.

## **12. 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.

## **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.

### **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.

## **14. 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 MSDS 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. Maestrogen Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.



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