MAGIC BEADS

# Material Safety Data Sheet (MSDS)
## MAGic™ Beads Oligo(dT)

## 1. Product and Company Information

**Product name**
MAGic™ Beads Oligo(dT)

**General use**
Binding of poly-adenylated molecules and their purification. For *in vitro* research use only. Not for animal or human use.

**Product number**
17xx

**Chemical family**
Not defined

**CAS number**
Not yet assigned

**Manufacturer's name and address**
MAGic Bioprocessing, Virdings Allé 28, SE-75450 Uppsala, Sweden,

**Contact person**
Kristofer Eriksson, Virdings Allé 28, SE-75450 Uppsala, Sweden.
Telephone: +46 70 4419 330
E-mail: info@magicbioprocessing.com

**Product use**
For *in vitro* isolation and purification of poly-adenylated molecules, e.g. mRNAs. Not for animal or human use.

## 2. Hazards Identification

**Classification of the substance**

**Product definition**
The product is a mixture.

**Classification according to regulation (EC) No.1272/2008(CLP/GHS) and 67/548/EEC**
R10, Flammable Liquid 3, H226

**Ingredients of unknown toxicity**
No information available, product should be handled with caution.

**Ingredients of unknown ecotoxicity**
No information available. Spill to the environment should be prevented.

**Ingredients of known ecotoxicity**
Contains ethanol 15-20% which is toxic to aquatic environment.

**Classification**
R10, H226

**Physical/chemical hazards**
Flammable
Product may cause sensitization by inhalation and skin contact. May cause adverse effects in the environment.

**Label elements**
Flammable



**Hazard statement**

Flammable liquid and vapors

**Precautionary statements**

**Prevention**
Wear protective gloves. Wear eye or face protection, use safety glasses with side protection.
Keep away from heat, sparks, open flames and hot surfaces.

**Response**
If on skin or hair, take off contaminated clothing. Rinse skin or hair with plenty of water.

**Storage**
Keep cool

**Other hazards which do not result in classification**
Not available

**Potential health effects**
Eyes: May cause irritation to the eyes
Skin: May cause irritation to the skin
Ingestion: No data available
Inhalation: No data available

**Effects of acute exposure after ingestion or inhalation**
No data available

**Effects of chronic exposure**
No data available

## 3. Composition/Information on Ingredients

**Ingredients/Components**

| Product/ingredient | Identifiers | % | Classification | |
|---|---|---|---|---|
| | | | Regulation 67548/EEC | 1272/2008 (CLPGHS) |
| Ethanol | | 15-20 | Flammable, R10 | Flammable liquid, H226 |
| MAGic™ Beads Oligo(dT) | | 10 | Not classified | |
| Water | | 70-75 | N/A | N/A |

**CAS Registry Number**
Not yet assigned

## 4. First Aid Measures

**Inhalation**
Remove exposed subject to fresh air. Seek immediate medical attention if symptoms appear.

**Ingestion**
Do not ingest. Seek immediate medical attention if symptoms appear.

**Skin**
Wash skin with soap and rinse with plenty of water. Seek medical attention if irritation develops.

**Eyes**
Immediately flush eyes with plenty of water. If symptoms as redness or irritation, seek immediate medical attention.

**Protection to first aiders**
No action shall be taken involving any personal risk without suitable training

**Most important symptoms and effects, acute and delayed**

**Potential acute health effects**

**Eye contact**
No known acute effect

**Inhalation**
No known acute effect

**Skin contact**
No known acute effect

**Ingestion**
No known acute effect

**Over exposure signs**

**Eye contact**
No data available

**Inhalation**
No data available

**Skin contact**
No data available

**Ingestion**
No data available

## 5. Fire Fighting Measures

**Extinguishing media**
Use dry chemical, $CO_2$, water or foam

**Conditions of flammability**

**Flash point**
≥23°C

**Initial boiling point**
≥60°C

**Auto-ignition temperature**
No data available

**Hazards from the substance or mixture**
Flammable liquid and vapor

**Hazardous combustion products**
Decomposition product may contain the following materials:
Carbon dioxide
Carbon monoxide

**Advice to firefighters**

**Special precautions for firefighters**
Isolate the fire scene by removing all persons from the vicinity of the incident if there is a fire. No involvement of un-trained personal should take place. Move all containers to a safe area. Use water spray to keep containers cool.

**Special protective equipment for fire-fighters**
Fire fighters should wear appropriate protective gowning and self-contained full face breathing apparatus.
MAGic™Beads Oligo(dT) is stable under normal environmental storage conditions.

**Explosion data**
MAGic™Beads Oligo(dT) is not explosive.

## 6. Accidental Release Measures

**Procedures to be followed in case of a leak or spill**
For small spills of solution, dilute with water and mop up. For large spills, contain and collect spillage by a non-combustible adsorbent and follow national and local regulations for disposal of the spill.
Avoid spreading the product as much as possible.

## 7. Handling and Storage

**Handling procedures**
Put on appropriate protective equipment, do not ingest. Avoid contact with eyes skin and clothing. Avoid breathing vapors and dust. Use only with adequate ventilation. Store and use away from heat, sparks and open fire. Protect from electrostatic discharges.

**Storage requirements**
Store cooled and protected from light.

## 8. Exposure Controls/Personal Protection

**Personal protective equipment to be used**
Usual protection of all personnel using the product (gloves and eyeglasses).

## 9. Physical and Chemical Properties

**Physical state**
MAGic™Beads Oligo(dT) is suspension of solids in water-ethanol mixture.

**Odor and appearance**
MAGic™Beads Oligo(dT) solution has a sweet alcohol odor. It is a suspension of black particles.

**Specific gravity**
Approximately 1kg/liter

**Vapor pressure**
No data available

**Evaporation rate**
No data available

**Boiling point**
Not determined

**Freezing point/melting point**
No data available

**pH**
Near neutral pH

## 10. Stability and Reactivity

**Conditions under which the product is chemically unstable**
None known

**Name of any substance or class of substance with which the product is incompatible**
None known

**Conditions of reactivity**
MAGic™Beads Oligo(dT) is not reactive

**Hazardous decomposition products**
Decomposition products should not be produced at specified storage conditions.

## 11. Toxicological Information

**Irritancy**
Repeated contact with skin may cause dryness and cracking of skin.

**Sensitization**
No studies have been performed on sensitization.

**Carcinogenicity**
No carcinogenicity studies have been conducted.

**Reproductive toxicity**
No data available

**Teratogenicity**
No studies on teratogenicity have been conducted

**Mutagenicity**
No studies on mutagenicity have been performed

**Name of toxicologically synergistic products**
None known

## 12. Ecological Information

**Toxicity**

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| Ethanol | Acute EC50>100ppm fresh water<br>Acute LC50 25500 µg/ml marine water<br>Acute LC50 42000 µg/ml fresh water<br>Chronic NOEC <6.3 g/liter | Daphnia<br>Crustaceans,<br>Fish<br>Daphnia | 48 hours<br>48 hours<br>4 days<br>48 hours |
| MAGic™Beads Oligo(dT) | Not studied | | |

**Degradability**

| Product/ingredient name | Test | Result |
|---|---|---|
| Ethanol | - | 100%-Readily-20 days |
| MAGic™Beads Oligo(dT) | - | Not tested |

## 13. Disposal Considerations

**Waste disposal**
Generation of waste should be avoided as much as possible. Avoid spreading waste. Disposal or recycling of waste should agree with Environmental Regulations, local or national. Containers should not be reused but recycled after thorough rinse with water.
Within the present knowledge of MAGic Bioprocessing, MAGic™Beads Oligo(dT) is not classified as dangerous waste according to the EU directive 91/689/EEG

## 14. Transport Information

**International directives for transportation**

**RID/ADR**
Non-hazardous for road transport

**IMDG**
Non-hazardous for sea transport

**IATA**
Non-hazardous for air transport.
According to IATA Special Provision A 58, aqueous solutions containing 24% or less of ethanol is not subject to these regulations.

**Special shipping information**
None

## 15. Regulatory Information

This document complies with Controlled Products Regulations and the MSDS contains all the information required by those regulations.

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVE 67/548/EEC
INDICATION OF DANGER
R-PHRASES: 10
CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVE EC 1272/2008(CLP)
INDICATION OF DANGER
H226

**Caution: Product not yet fully tested, use protection as directed in section 7**

## 16. Other Information

**WARRANTY**
The above information is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions. It does not represent any guarantee of the properties of the product. MAGic Bioprocessing shall not be held liable for any damage resulting from handling or from contact with the above product.

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**MAGic Bioprocessing**
Virdings allé 28
SE- 754 50 Uppsala
Sweden
www.magicbioprocessing.com
info@magicbioprocessing.com