

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU) No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name: **MagReSyn® Mag-Net™ HP Beads**

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

##### Technical function

**Product Description:** Magnetic microparticles used in Mag-Net™ Kit

##### Application of the substance / the mixture

Magnetic microparticles used for enrichment of extracellular vesicles from biofluids. This product is for research and development use only.

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

ReSyn Biosciences Pty Ltd  
Building 20  
CSIR  
Meiring Naude Road  
Brummeria  
Pretoria  
South Africa  
0184  
+2763 358 5538

#### 1.4 Emergency telephone number: +2763 358 5538

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

#### 2.2 Label elements

##### Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

##### Hazard pictograms



GHS02 GHS07

##### Signal word Danger

##### Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

(Contd. on page 2)

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU) No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

Trade name: MagReSyn® Mag-Net™ HP Beads

(Contd. of page 1)

- P102 Keep out of reach of children.
- P103 Read carefully and follow all instructions.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Unknown acute toxicity:**  
This value refers to knowledge of known, established toxicological or ecotoxicological values.  
0 % of the mixture consists of component(s) of unknown toxicity.  
Contains 0 % of components with unknown hazards to the aquatic environment.
- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**  
2% MagReSyn® Mag-Net™ HP beads microparticles  
Polymer coated microparticles: (20 mg per ml, no CAS number, consists of 60% magnetite and 40% polymer, polymer is a polyethyleneimine derivative)
- **Description:**  
Mixture of substances listed with non-hazardous additions and/or components that are present at concentrations below regulatory threshold for classification and reporting. All non-hazardous components, components listed under the threshold, and listed components total 100%.

#### · **Dangerous Components:**

|                                                                 |         |                      |        |
|-----------------------------------------------------------------|---------|----------------------|--------|
| CAS: 64-17-5<br>Index number: 603-002-00-5<br>RTECS: KQ 6300000 | Ethanol | ⚠ Flam. Liq. 2, H225 | 10–30% |
|-----------------------------------------------------------------|---------|----------------------|--------|

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** If symptoms persist, call a physician.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Wash with plenty of water and soap.  
If skin irritation occurs, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.  
If eye irritation occurs, consult a doctor.  
If easy to do so, remove contact lenses if worn.
- **After swallowing:**  
Rinse mouth out with water.  
If swallowed and symptoms occur, consult a doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU)  
No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

Trade name: MagReSyn® Mag-Net™ HP Beads

(Contd. of page 2)

- **4.3 Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **5.2 Special hazards arising from the substance or mixture** Flammable liquid and vapour.
- **5.3 Advice for firefighters**  
Cool fire exposed containers with water.  
Pay attention to flashback.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Protect from heat.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Keep container tightly closed.  
Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

(Contd. on page 4)

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU) No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

Trade name: MagReSyn® Mag-Net™ HP Beads

(Contd. of page 3)

· **Additional information:** The lists valid during the making were used as basis.

### · 8.2 Exposure controls

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Where acceptable concentrations cannot be maintained by general mechanical ventilation, local exhaust ventilation is recommended.

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

· **Respiratory protection:** Not required.

· **Hand protection**



Protective gloves

### · **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**



Tightly sealed goggles

· **Body protection:**



Lab coat

· **Environmental exposure controls** None

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

· **General Information**

· **Physical state**

Liquid

· **Colour:**

Black

· **Odour:**

Slight

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Undetermined.

· **Boiling point or initial boiling point and boiling range** ≥78 °C (64-17-5 Ethanol)

· **Flammability**

Highly flammable.

· **Lower and upper explosion limit**

· **Lower:**

3,5 Vol % (64-17-5 Ethanol)

· **Upper:**

15 Vol % (64-17-5 Ethanol)

(Contd. on page 5)

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU) No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

Trade name: MagReSyn® Mag-Net™ HP Beads

(Contd. of page 4)

|                                                                                        |                                                                                             |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| · <b>Flash point:</b>                                                                  | 16 °C (64-17-5 Ethanol)                                                                     |
| · <b>Auto-ignition temperature:</b>                                                    | ≥425 °C (64-17-5 Ethanol)                                                                   |
| · <b>Decomposition temperature:</b>                                                    | Not determined.                                                                             |
| · <b>pH at 20 °C</b>                                                                   | ~7                                                                                          |
| · <b>Viscosity:</b>                                                                    |                                                                                             |
| · <b>Kinematic viscosity</b>                                                           | Not determined.                                                                             |
| · <b>Dynamic:</b>                                                                      | Not determined.                                                                             |
| · <b>Solubility</b>                                                                    |                                                                                             |
| · <b>water:</b>                                                                        | Fully miscible.                                                                             |
| · <b>Partition coefficient n-octanol/water (log value)</b>                             | Not determined.                                                                             |
| · <b>Vapour pressure at 20 °C:</b>                                                     | 59 hPa (64-17-5 Ethanol)                                                                    |
| · <b>Density and/or relative density</b>                                               |                                                                                             |
| · <b>Density at 20 °C:</b>                                                             | 0,789 g/cm <sup>3</sup>                                                                     |
| · <b>Relative density</b>                                                              | Not determined.                                                                             |
| · <b>Bulk density:</b>                                                                 | 339–1.843 kg/m <sup>3</sup>                                                                 |
| · <b>Vapour density</b>                                                                | Not determined.                                                                             |
| · <b>9.2 Other information</b>                                                         |                                                                                             |
| · <b>Appearance:</b>                                                                   |                                                                                             |
| · <b>Form:</b>                                                                         | Suspension                                                                                  |
| · <b>Important information on protection of health and environment, and on safety.</b> |                                                                                             |
| · <b>Ignition temperature:</b>                                                         | Product is not selfigniting.                                                                |
| · <b>Explosive properties:</b>                                                         | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · <b>Solvent content:</b>                                                              |                                                                                             |
| · <b>Organic solvents:</b>                                                             | 20,0 %                                                                                      |
| · <b>VOC (EC)</b>                                                                      | 20,00 %                                                                                     |
| · <b>Change in condition</b>                                                           |                                                                                             |
| · <b>Softening point/range</b>                                                         |                                                                                             |
| · <b>Oxidising properties</b>                                                          | None                                                                                        |
| · <b>Evaporation rate</b>                                                              | Not determined.                                                                             |
| · <b>Information with regard to physical hazard classes</b>                            |                                                                                             |
| · <b>Flammable liquids</b>                                                             | Highly flammable liquid and vapour.                                                         |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**  
The product is stable under normal conditions.  
No further relevant information available.
- **10.2 Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heat, flame and ignition sources.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

(Contd. on page 6)

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU) No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

Trade name: MagReSyn® Mag-Net™ HP Beads

(Contd. of page 5)

|                                                      |               |                            |
|------------------------------------------------------|---------------|----------------------------|
| · <b>LD/LC50 values relevant for classification:</b> |               |                            |
| <b>64-17-5 Ethanol</b>                               |               |                            |
| Oral                                                 | LD50          | 7.060 mg/kg (Rat)          |
| Inhalative                                           | LC50/4 h      | 20.000 mg/l (Rat)          |
|                                                      | LC50/96 hours | 12.900–15.300 Mg/l (trout) |

· **Primary irritant effect:**

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

|                                          |
|------------------------------------------|
| · <b>Endocrine disrupting properties</b> |
| None of the ingredients is listed.       |

## SECTION 12: Ecological information

· **12.1 Toxicity**

|                             |
|-----------------------------|
| · <b>Aquatic toxicity:</b>  |
| <b>64-17-5 Ethanol</b>      |
| EC50 34.900 mg/kg (daphnia) |

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.

## SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
Observe all federal, state and local environmental regulations when disposing of this material.

- **Waste disposal key:** US EPA RCRA waste code D001 (ignitability characteristic).

|                                   |
|-----------------------------------|
| · <b>European waste catalogue</b> |
| HP3 Flammable                     |

(Contd. on page 7)

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU) No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

Trade name: MagReSyn® Mag-Net™ HP Beads

(Contd. of page 6)

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR, IMDG, IATA**
- **14.2 UN proper shipping name**
- **ADR**
- **IMDG**
- **IATA**
- **14.3 Transport hazard class(es)**

UN1170

1170 ETHANOL (ETHYL ALCOHOL)  
ETHANOL (ETHYL ALCOHOL)  
Ethanol

- **ADR**



Limited Quantity

- **Class**
- **Label**

3 Flammable liquids.  
3

- **IMDG, IATA**



Limited Quantity

- **Class**
- **Label**
- **14.4 Packing group**
- **ADR, IMDG, IATA**
- **14.5 Environmental hazards:**
- **14.6 Special precautions for user**
- **Hazard identification number (Kemler code):**
- **EMS Number:**
- **Stowage Category**
- **14.7 Maritime transport in bulk according to IMO instruments**

3 Flammable liquids.  
3+ID8000

II  
Not applicable.  
Warning: Flammable liquids.  
33  
F-E,S-D  
A  
Not applicable.

- **Transport/Additional information:**

- **ADR**
- **Limited quantities (LQ)**
- **Transport category**

1L  
2

(Contd. on page 8)

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU) No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

Trade name: MagReSyn® Mag-Net™ HP Beads

(Contd. of page 7)

|                            |                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------|
| · Tunnel restriction code  | D/E                                                                                                             |
| · IMDG                     |                                                                                                                 |
| · Limited quantities (LQ)  | 1L                                                                                                              |
| · Excepted quantities (EQ) | Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| · IATA                     |                                                                                                                 |
| · Remarks:                 | Code: E1<br>Excepted Quantity Shipment                                                                          |
|                            | Code Maximum Quantity (inner package) Maximum<br>Quantity per outer package                                     |
|                            | E0 Not permitted Not                                                                                            |
|                            | permitted                                                                                                       |
|                            | E1 30g / 30ml 1Kg / 1L                                                                                          |
|                            | E2 30g / 30ml 500g /                                                                                            |
|                            | 500ml                                                                                                           |
|                            | E3 30g / 30ml 300g /                                                                                            |
|                            | 300ml                                                                                                           |
|                            | E4 1g / 1ml 500g /                                                                                              |
|                            | 500ml                                                                                                           |
|                            | E5 1g / 1ml 300g /                                                                                              |
|                            | 300ml                                                                                                           |
| · UN "Model Regulation":   | UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II                                                                          |

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Proposition 65

#### · Chemicals known to cause cancer:

None of the ingredients is listed.

#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

#### · Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· Seveso category P5c FLAMMABLE LIQUIDS

· Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

#### · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

#### · REGULATION (EU) 2019/1148

#### · Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

#### · Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

(Contd. on page 9)

## Safety data sheet

REACH: Regulation (EC) No 1907/2006 (in particular as amended by Regulation (EU) No. 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 19.08.2025

Version number 1

Revision: 19.08.2025

Trade name: MagReSyn® Mag-Net™ HP Beads

(Contd. of page 8)

|                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|
| · <b>Regulation (EC) No 273/2004 on drug precursors</b>                                                                                         |
| None of the ingredients is listed.                                                                                                              |
| · <b>Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors</b> |
| None of the ingredients is listed.                                                                                                              |
| · <b>15.2 Chemical safety assessment:</b> A Chemical Safety Assessment has not been carried out.                                                |

### SECTION 16: Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

#### · Relevant phrases

H225 Highly flammable liquid and vapour.

· **Contact:** Access GHS, LLC - 888-363-4870 - [Team@access-ghs-sds.com](mailto:Team@access-ghs-sds.com)

· **Date of previous version:** 18.08.2025

#### · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

· **\* Data compared to the previous version altered.**