

A Geno Technology, Inc. (USA) brand name

Safety Data Sheet

Cat. # 786-906

Amine Magnetic Beads

Size: 1ml resin





Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 4/30/2013 Revision date: 5/11/2017 Version: 1.1

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

1.1. Product identifier

Product form : Mixture

Product name : Amine Magnetic Beads

Product code : 192A
Product group : Blend

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Research and development

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Geno Technology, Inc./ G-Biosciences 9800 Page Avenue 63132-1429 Saint Louis - United States T 800-628-7730 - F 314-991-1504

technical@GBiosciences.com - www.GBiosciences.com

1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|----------------------------|---|------------|--|
| Deionized water | (CAS-No.) 7732-18-5 | >= 80 | Not classified |
| Sodium phosphate monobasic | (CAS-No.) 7558-80-7 (EC-No.) 231-449-2 | 0.5 - 2 | Not classified |
| iron(II,III)oxide | (CAS-No.) 1317-61-9 (EC-No.) 215-277-5 | 0.5 - 2 | Not classified |
| DEXTRAN | (CAS-No.) 9004-54-0 (EC-No.) 232-677-5 | 0.5 - 2 | Not classified |
| Primary Amino Group | | 0.5 - 2 | Not classified |
| sodium chloride | (CAS-No.) 7647-14-5 (EC-No.) 231-598-3 | 0.5 - 2 | Not classified |
| sodium azide | (CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7 | 0.05 - 0.5 | Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

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| | TWEEN 20 | (CAS-No.) 9005-64-5 | < 0.05 | Not classified |
|--|----------|---------------------|--------|----------------|
|--|----------|---------------------|--------|----------------|

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

: Ensure good ventilation of the work station. Wear personal protective equipment. Precautions for safe handling

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including any incompatibilities

: Store in a well-ventilated place. Keep cool. Storage conditions

Storage temperature : 4 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium azide (26628-22-8)

EU - Occupational Exposure Limits

| IOELV TWA (mg/m³) | 0.1 mg/m ³ |
|--------------------|-----------------------|
| IOELV STEL (mg/m³) | 0.3 mg/m ³ |

United Kingdom - Occupational Exposure Limits

| WEL TWA (mg/m³) | 0.1 mg/m³ |
|------------------|-----------|
| WEL STEL (mg/m³) | 0.3 mg/m³ |

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8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : liquid slurry.

Colour : Dark red to light brown. Odour No data available Odour threshold : No data available рΗ : No data available Relative evaporation rate (butylacetate=1) : No data available : Not applicable Melting point Freezing point : No data available Boiling point : No data available : No data available Flash point · No data available Auto-ignition temperature Decomposition temperature : No data available Flammability (solid, gas) : Not applicable Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available Solubility · No data available Log Pow : No data available Viscosity, kinematic : No data available : No data available Viscosity, dynamic Explosive properties : No data available Oxidising properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive limits

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Hazardous decomposition products.

: No data available

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| SECTION 11: | Toxicologica | I information |
|--------------------|--------------|---------------|
|--------------------|--------------|---------------|

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

| sodium chloride (7647-14-5) | |
|-----------------------------|--|
| LD50 oral rat | > 3980 mg/kg bodyweight (Rat, Experimental value, 20% aqueous solution, Oral) |
| LD50 dermal rabbit | > 10000 mg/kg (Rabbit, Experimental value, Dermal) |
| LC50 inhalation rat (mg/l) | > 42 mg/l air (1 h, Rat, Male, Experimental value, 20% aqueous solution, Inhalation (aerosol)) |

| iron(II,III)oxide (1317-61-9) | |
|-------------------------------|--|
| LD50 oral rat | > 5000 mg/kg bodyweight (Rat, Male / female, Experimental value, Oral) |

| sodium azide (26628-22-8) | |
|---------------------------|--|
| LD50 oral rat | 27 mg/kg |
| LD50 dermal rabbit | 19 - 48 mg/kg bodyweight (Rabbit, Inconclusive, insufficient data, Dermal) |

| Sodium phosphate monobasic (7558-80-7) | | |
|--|-------------------------------|--|
| LD50 oral rat | 8290 mg/kg (Rat, Oral) | |
| LD50 dermal rabbit | > 7940 mg/kg (Rabbit, Dermal) | |
| Skin corrosion/irritation | : Not classified | |
| Serious eye damage/irritation | : Not classified | |
| Respiratory or skin sensitisation | : Not classified | |
| Germ cell mutagenicity | : Not classified | |
| Carcinogenicity | : Not classified | |
| Reproductive toxicity | : Not classified | |
| STOT-single exposure | : Not classified | |
| STOT-repeated exposure | : Not classified | |
| Aspiration hazard | : Not classified | |

| SECTION 12: Ecological i | nformation |
|--------------------------|------------|
|--------------------------|------------|

| 12. | 1. | ΙΟΧΙ | CII | y |
|-----|----|------|-----|---|
| | | | | |

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term

adverse effects in the environment.

Acute aquatic toxicity : Not classified Chronic aquatic toxicity : Not classified

| sodium chloride (7647-14-5) | |
|-----------------------------|---|
| LC50 fish 1 | 5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value) |

| sodium azide (26628-22-8) | |
|---------------------------|---|
| LC50 fish 1 | 0.8 mg/l (Equivalent or similar to OECD 203, 96 h, Gasterosteus aculeatus, Fresh water, Experimental value, Nominal concentration) |
| EC50 96h algae (1) | 0.35 mg/l (Equivalent or similar to OECD 201, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration) |

| Sodium phosphate monobasic (7558-80-7) | |
|--|---|
| LC50 fish 1 | > 2400 mg/l (OECD 203: Fish, Acute Toxicity Test, 48 h, Leuciscus idus) |
| 12.2. Persistence and degradability | |
| sodium chloride (7647-14-5) | |
| Persistence and degradability | Biodegradability: not applicable. |

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| Chemical oxygen demand (COD) | Not applicable |
|------------------------------|----------------|
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

| iron(II,III)oxide (1317-61-9) | |
|-------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |
| BOD (% of ThOD) | Not applicable (inorganic) |

| TWEEN 20 (9005-64-5) | |
|-------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

| sodium azide (26628-22-8) | |
|-------------------------------|---|
| Persistence and degradability | Biodegradability in soil: not applicable. Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |

| Sodium phosphate monobasic (7558-80-7) | |
|--|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |
| 12.3. Bioaccumulative potential | |
| sodium chloride (7647-14-5) | |
| Log Pow | -3 (Calculated) |
| Bioaccumulative potential | Not bioaccumulative. |

| iron(II,III)oxide (1317-61-9) | |
|-------------------------------|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |

| TWEEN 20 (9005-64-5) | |
|---------------------------|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |

| sodium azide (26628-22-8) | |
|---------------------------|----------------------|
| Bioaccumulative potential | Not bioaccumulative. |

| Sodium phosphate monobasic (7558-80-7) | |
|--|---|
| Log Pow | -3.96 (Estimated value) |
| Bioaccumulative potential | Not bioaccumulative. |
| 12.4. Mobility in soil | |
| sodium chloride (7647-14-5) | |
| Surface tension | 73.03 mN/m (23 °C, 14.5 g/l) |
| Ecology - soil | No (test)data on mobility of the substance available. |

| iron(II,III)oxide (1317-61-9) | |
|-------------------------------|------------------------|
| Surface tension | Not applicable (solid) |

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| Ecology - soil | Adsorbs into the soil. |
|----------------|------------------------|

| sodium azide (26628-22-8) | | |
|--|--|--|
| Ecology - soil | Highly mobile in soil. | |
| 12.5. Results of PBT and vPvB assessment | | |
| Component | | |
| iron(II,III)oxide (1317-61-9) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII | |
| sodium chloride (7647-14-5) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII | |

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Waste treatment methods.

| SECTION 14: Transport information | on |
|-----------------------------------|----|
|-----------------------------------|----|

| In accordance with ADR / RID |) / IMDG / IATA | . / ADN |
|------------------------------|-----------------|---------|
|------------------------------|-----------------|---------|

| 14.1 | . U | N num | ber |
|------|-----|-------|-----|
|------|-----|-------|-----|

UN-No. (ADR) : Not regulated UN-No. (IMDG) : Not regulated UN-No. (IATA) : Not regulated UN-No. (ADN) : Not regulated UN-No. (RID) : Not regulated UN-No. (RID)

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated
Proper Shipping Name (ADN) : Not regulated
Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

RID

Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated
Packing group (ADN) : Not regulated
Packing group (RID) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

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Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Full text of H- and EUH-statements: | | |
|-------------------------------------|---|--|
| Acute Tox. 1 (Dermal) | Acute toxicity (dermal), Category 1 | |
| Acute Tox. 2 (Oral) | Acute toxicity (oral), Category 2 | |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 | |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 | |
| H300 | Fatal if swallowed. | |
| H310 | Fatal in contact with skin. | |
| H400 | Very toxic to aquatic life. | |
| H410 | Very toxic to aquatic life with long lasting effects. | |

Safety Data Sheet applicable for regions

: GB - United Kingdom

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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