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A Geno Technology, Inc. (USA) brand name

Safety Data Sheet

Cat. # IT4329

Size: 1 96-well plate



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ELISA Kits

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

1.1. Product identifier

| | |
|-------------------------------|---|
| Product form | : Article |
| Product name | : ELISA Kits |
| Product code | : ITXXXX |
| Product group | : Trade product |
| Other means of identification | : Antibody Coated Microtiter Plate, ELISA Detection Reagent (contains Proclin 300), Recombinant Protein Standard (contains Proclin 300), Recombinant Protein Standard Diluent, Secondary Antibody Solution (contains Proclin 300), Secondary Antibody Diluent (contains Proclin 300), ELISA Detection Reagent Diluent (contains Proclin 300), ELISA Detection Substrate (TMB) (contains Tetramethylbenzidine), Wash Buffer [25X], ELISA Stop Solution (contains Sulfuric acid). |

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

1.2.1. Relevant identified uses

No additional information available

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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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 |
| Bovine Serum Albumin | (CAS-No.) 9048-46-8 | 0.5 - 2 | Not classified |
| sodium chloride | (CAS-No.) 7647-14-5 (EC-No.) 231-598-3 | 0.5 - 2 | Not classified |
| sulfuric acid | (CAS-No.) 7664-93-9 (EC-No.) 231-639-5 (EC Index-No.) 016-020-00-8 | 0.05 - 0.5 | Skin Corr. 1A, H314 |
| Disodium Hydrogen Phosphate | (CAS-No.) 7558-79-4 | 0.05 - 0.5 | Not classified |
| 3,3',5,5'-Tetramethylbenzidine, dihydrochloride hydrate | (CAS-No.) 207738-08-7 | 0.05 - 0.5 | Not classified |
| ProClin 300 | (CAS-No.) 96118-96-6 | < 0.05 | Not classified |

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| | | | |
|---------------------------------|---|--------|----------------|
| potassium chloride | (CAS-No.) 7447-40-7 (EC-No.) 231-211-8 | < 0.05 | Not classified |
| Potassium Phosphate (Monobasic) | (CAS-No.) 7778-77-0 (EC-No.) 231-913-4 | < 0.05 | Not classified |

Specific concentration limits:

| Name | Product identifier | Specific concentration limits |
|---------------|--|--|
| sulfuric acid | (CAS-No.) 7664-93-9 (EC-No.) 231-639-5 (EC Index-No.) 016-020-00-8 | (5 =<C < 15) Eye Irrit. 2, H319 (5 =<C < 15) Skin Irrit. 2, H315 (C >= 15) Skin Corr. 1A, H314 |

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

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

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

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sulfuric acid (7664-93-9)

| | | |
|----|--------------------------------|------------------------|
| EU | IOELV TWA (mg/m ³) | 0.05 mg/m ³ |
|----|--------------------------------|------------------------|

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 |
| Colour | : No data available |
| Odour | : No data available |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| 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 |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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).

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10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Hazardous decomposition products.

SECTION 11: Toxicological 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) |
| LD50 dermal rabbit | > 10000 mg/kg (Rabbit, Experimental value) |
| LC50 inhalation rat (mg/l) | > 42 mg/l air (1 h, Rat, Male, Experimental value) |

potassium chloride (7447-40-7)

| | |
|---------------|---|
| LD50 oral rat | 3020 mg/kg bodyweight (Rat, Female, Experimental value) |
|---------------|---|

Potassium Phosphate (Monobasic) (7778-77-0)

| | |
|--------------------|-----------------------|
| LD50 oral rat | 7100 mg/kg (Rat) |
| LD50 dermal rabbit | > 4640 mg/kg (Rabbit) |

sulfuric acid (7664-93-9)

| | |
|-----------------------------------|---|
| LD50 oral rat | 2140 mg/kg bodyweight (Rat, Experimental value) |
| 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 information

12.1. Toxicity

| | |
|--------------------------|---|
| 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) |
|-------------|---|

potassium chloride (7447-40-7)

| | |
|--------------------|--|
| LC50 fish 1 | 2010 mg/l (96 h, Lepomis macrochirus, Static system) |
| LC50 fish 2 | 880 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value) |
| EC50 Daphnia 1 | 660 mg/l (EPA 600/4-90/027, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) |
| EC50 72h algae (1) | 2500 mg/l (Scenedesmus subspicatus) |
| ErC50 (algae) | > 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value) |

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| Potassium Phosphate (Monobasic) (7778-77-0) | |
|--|-----------------------------------|
| LC50 fish 1 | > 900 mg/l (48 h, Leuciscus idus) |

| sulfuric acid (7664-93-9) | |
|----------------------------------|----------------------------------|
| LC50 fish 1 | 42 mg/l (96 h, Gambusia affinis) |
| EC50 Daphnia 1 | 29 mg/l (24 h, Daphnia magna) |

12.2. Persistence and degradability

| Bovine Serum Albumin (9048-46-8) | |
|---|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

| sodium chloride (7647-14-5) | |
|------------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

| potassium chloride (7447-40-7) | |
|---------------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD) | Not applicable (inorganic) |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |

| Potassium Phosphate (Monobasic) (7778-77-0) | |
|--|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

| sulfuric acid (7664-93-9) | |
|----------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD) | 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. |

| potassium chloride (7447-40-7) | |
|---------------------------------------|-------------------------|
| Log Pow | -0.46 (Estimated value) |
| Bioaccumulative potential | Not bioaccumulative. |

| Potassium Phosphate (Monobasic) (7778-77-0) | |
|--|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |

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| sulfuric acid (7664-93-9) | |
|------------------------------------|---|
| Log Pow | -2.2 (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. |

| potassium chloride (7447-40-7) | |
|---------------------------------------|---|
| Ecology - soil | No (test)data on mobility of the substance available. |

12.5. Results of PBT and vPvB assessment

| Component | |
|-----------------------------|---|
| 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

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

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

14.2. UN proper shipping name

| | |
|-----------------------------|------------------|
| Proper Shipping Name (ADR) | : Not applicable |
| Proper Shipping Name (IMDG) | : Not applicable |
| Proper Shipping Name (IATA) | : Not applicable |
| Proper Shipping Name (ADN) | : Not applicable |
| Proper Shipping Name (RID) | : Not applicable |

14.3. Transport hazard class(es)

ADR

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

IMDG

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

IATA

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

ADN

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

RID

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

14.4. Packing group

| | |
|----------------------|------------------|
| Packing group (ADR) | : Not applicable |
| Packing group (IMDG) | : Not applicable |
| Packing group (IATA) | : Not applicable |
| Packing group (ADN) | : Not applicable |
| Packing group (RID) | : Not applicable |

14.5. Environmental hazards

| | |
|-------------------------------|--|
| Dangerous for the environment | : No |
| Marine pollutant | : No |
| Other information | : No supplementary information available |

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14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

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 substance on the REACH candidate list
Directive 2012/18/EU (SEVESO III)

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:

| | |
|---------------|--|
| Skin Corr. 1A | Skin corrosion/irritation, Category 1A |
| H314 | Causes severe skin burns and eye damage. |

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