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

1.1 Trade Name (As Labelled): **CHO PLBL2 ELISA**

1.2 Product Use: This assay is intended for the quantitative measurement of CHO PLBL2 as a process-related host cell protein (HCP) impurity derived from recombinant production processes based on CHO cell lines.

1.3 Manufacturer's Name: **BioGenes GmbH**
Address: Koepenicker Str. 325, 12555 Berlin, Germany
Business Phone: +49 (0)30 6576 2396 (Product information)
E-Mail: safetydatasheet@biogenes.de

1.4 Emergency telephone number: +49 30-19 24 0 (Poison Centre Germany)

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 [CLP]

Supplementary Hazard Information:
EUH808 Contains CMIT/MIT. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

Stop-Reagent:

Hazard statement(s)

H290 May be corrosive to metals
H314 Causes sever skin burns and eye damage

Precautionary statement(s):

Prevention

P260 Do not breathe dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves/eye protection/face protection

Response

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse SKIN with water/shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310 - Immediately call POISON CENTER or doctor.

Hazard pictogram



Signal word

Danger

2.3 Other hazards

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) or have endocrine disrupting properties according to REACH Article 57(f) or Comission Delegated Regulation (EU) 2017/2100 or Comission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

This kit contains 8 components making up the CHO PLBL2 ELISA Kit. This product is used in laboratories to determine the presence of HCP contamination in products manufactured by expression in CHO.

The kit contains an antibody coated Microtest Plate and the following mixtures: Enzyme Conjugate, Detector Antibody, CHO PLBL2 Kit Standard, Washing and Assay Buffer, TMB Substrate Solution and Stop Reagent.

3.1 Substances

This substance is a mixture.

3.2 Mixture

96-well, pre-coated with affinity-purified anti-PLBL2-total-IgG (polyclonal) dried and sealed in foil bag with desiccant ready-to-use Microtest Plate.

HAZARDOUS INGREDIENTS: **Capture Antibody coated Microtest Plate**	**CAS No./** **EC No./** **Registration No.**	**Amount**	**Hazard Classification;** **Hazard Statements**
Protein A-purified CHO PLBL2-specific capture antibody (polyclonal, rabbit)	Not Listed	<100 µg	Not Classified None

Kit standard of CHO PLBL2 in stabilized solution.

HAZARDOUS INGREDIENTS: **CHO PLBL2 Kit Standard, 100 µl**	**CAS No./** **EC No./** **Registration No.**	**Amount**	**Hazard Classification;** **Hazard Statements** According to Regulation (EC) No 1278/2008 (CLP)
reaction mass of CMIT/MIT: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3-one [EC no. 220-239-6] (CMIT/MIT = 3:1)	55965-84-9/ Not applicable/ 01-2120764691-48-XXXX	< 0.0014 %	Acute Tox. 2, H330; Acute Tox. 2; H310, Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH071 **SCL and/or M-factor:** Skin Corr. 1C; H314: C ≥ 0.6%; Skin Irrit. 2; H315: 0.06% ≤ C < 0.6%; Eye Dam 1, H318; C ≥ 0.6%; Eye Irrit. 2; H319: 0.06% ≤ C < 0.6%; Skin Sens. 1A; H317: C ≥ 0.0015% M-factor=100

Affinity-purified, biotin-conjugated anti-PLBL2-IgG (polyclonal) as 100x concentrate.

HAZARDOUS INGREDIENTS: Detector antibody anti- CHO PLBL2-Biotin, 300 µl	**CAS No./ EC No./ Registration No.**	**Amount**	**Hazard Classification; Hazard Statements** According to Regulation (EC) No 1278/2008 (CLP)
Tris Hydrochloride	1185-53-1/ 214-684-5	6-9 %	Not Classified None
Ethanediol	107-21-1/ 203-473-3	<5%	Hazardous, Irritant Hazard Phrases: H302, H373 Precaution Phrases: 301+312+330
reaction mass of CMIT/MIT: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3-one [EC no. 220-239-6] (CMIT/MIT = 3:1)	55965-84-9/ Not applicable/ 01-2120764691-48-XXXX	< 0.0014 %	Acute Tox. 2, H330; Acute Tox. 2; H310, Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH071 **SCL and/or M-factor:** Skin Corr. 1C; H314: C ≥ 0.6%; Skin Irrit. 2; H315: 0.06% ≤ C < 0.6%; Eye Dam 1, H318; C ≥ 0.6%; Eye Irrit. 2; H319: 0.06% ≤ C < 0.6%; Skin Sens. 1A; H317: C ≥ 0.0015% M-factor=100

Streptavidin-conjugated Peroxidase in stabilized solution.

HAZARDOUS INGREDIENTS: Enzyme Conjugate Streptavidin-Peroxidase Conjugate, 300 µl	**CAS No./ EC No./ Registration No.**	**Amount**	**Hazard Classification; Hazard Statements** According to Regulation (EC) No 1278/2008 (CLP)
2-methyl-2H-isothiazol-3-one hydrochloride	26172-54-3 247-499-3 01-2120764168-47	0.001-0.0025%	Acute Tox. 3; H301,Acute Tox. 2; H330, Acute Tox. 3; H311, Skin Corr. 1A; H314, Eye Dam. 1; H318, Skin Sens. 1A; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410 EUH071, **SCL and/or M-factor:** M-Factor (Acute aquatic toxicity): 1, M-Factor (Chronic aquatic toxicity): 1, specific concentration limit Skin Sens. 1A; H317 >= 0,0015 % , Acute toxicity estimate Acute oral toxicity: 175 mg/kg, Acute inhalation toxicity (dust/mist): 0,11 mg/l, Acute dermal toxicity: 246 mg/kg
reaction mass of CMIT/MIT: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3-one [EC no. 220-239-6] (CMIT/MIT = 3:1)	55965-84-9/ Not applicable/ 01-2120764691-48-XXXX	< 0.0014 %	Acute Tox. 2, H330; Acute Tox. 2; H310, Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH071 **SCL and/or M-factor:** Skin Corr. 1C; H314: C ≥ 0.6%; Skin Irrit. 2; H315: 0.06% ≤ C < 0.6%; Eye Dam 1, H318; C ≥ 0.6%; Eye Irrit. 2; H319: 0.06% ≤ C < 0.6%; Skin Sens. 1A; H317: C ≥ 0.0015% M-factor=100

TRIS-based buffer with Tween 10x stock solution.

HAZARDOUS INGREDIENTS: Washing Buffer (10x concentrate; 100 mL)	**CAS No./ EC No./ Registration No.**	**Amount**	**Hazard Classification; Hazard Statements** According to Regulation (EC) No 1278/2008 (CLP)
TRIS	77-86-1/ 201-064-4/ 01-2119957659-16-XXXX	< 2 %	Skin irrit. 2, H315, Eye irrit. 2, H319
reaction mass of CMIT/MIT: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3-one [EC no. 220-239-6] (CMIT/MIT = 3:1)	55965-84-9/ Not applicable/ 01-2120764691-48-XXXX	< 0.0014 %	Acute Tox. 2, H330; Acute Tox. 2; H310, Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH071 **SCL and/or M-factor:** Skin Corr. 1C; H314: C ≥ 0.6%; Skin Irrit. 2; H315: 0.06% ≤ C < 0.6%; Eye Dam 1, H318; C ≥ 0.6%; Eye Irrit. 2; H319: 0.06% ≤ C < 0.6%; Skin Sens. 1A; H317: C ≥ 0.0015% M-factor=100

TRIS-based buffer with Tween 10x stock solution.

HAZARDOUS INGREDIENTS: Assay Buffer (10x concentrate; 20 mL)	**CAS No./ EC No./ Registration No.**	**Amount**	**Hazard Classification; Hazard Statements** According to Regulation (EC) No 1278/2008 (CLP)
TRIS	77-86-1/ 201-064-4/ 01-2119957659-16-XXXX	< 2 %	Skin irrit. 2, H315, Eye irrit. 2, H319
reaction mass of CMIT/MIT: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3-one [EC no. 220-239-6] (CMIT/MIT = 3:1)	55965-84-9/ Not applicable/ 01-2120764691-48-XXXX	< 0.0014 %	Acute Tox. 2, H330; Acute Tox. 2; H310, Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH071 **SCL and/or M-factor:** Skin Corr. 1C; H314: C ≥ 0.6%; Skin Irrit. 2; H315: 0.06% ≤ C < 0.6%; Eye Dam 1, H318; C ≥ 0.6%; Eye Irrit. 2; H319: 0.06% ≤ C < 0.6%; Skin Sens. 1A; H317: C ≥ 0.0015% M-factor=100

TMB One substrate solution, ready-to-use solution

HAZARDOUS INGREDIENTS: TMB One SUBSTRATE SOLUTION, 15 mL	**CAS No./ EC No./ Registration No.**	**Amount**	**Hazard Classification; Hazard Statements** According to Regulation (EC) No 1278/2008 (CLP)
Contains no declarable substances	N/A	N/A	N/A

Stop Reagent with 0.5 M sulfuric acid

HAZARDOUS INGREDIENTS: STOP REAGENT, 15 mL	**CAS No./ EC No./ Registration No.**	**Amount**	**Hazard Classification; Hazard Statements** According to Regulation (EC) No 1278/2008 (CLP)
Sulfuric Acid	7664-93-9/ 231-639-5 Not applicable	< 5%	Severe skin burns and eye damage (Skin Corr. 1A) - H314; May be corrosive to metals

			(Met. Corr. 1) - H290

Hazard pictogram

GHS05



Signal word

Danger

SECTION 4: FIRST-AID MEASURES

4.1 Description of first aid measures

General information:
Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and EU-SDS to health professional with contaminated individual.
Following inhalation:
Not a normal route of entry, however if chemical is inhaled, or breathing is difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.
Following skin contact:
Wash contacted area with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Seek medical attention if irritation develops and persists.
Following eye contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
Following ingestion:
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO2), foam, water, extinguishing powder.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: None.

5.3 Advice for fire-fighters

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Use personal protective equipment, see Section 8. For emergency responders: Use personal protective equipment, see Section 8.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

Clear contaminated areas thoroughly.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:
Use in well-ventilated areas. Handle and open container with care. Always close containers tightly after the removal of product. Wear personal protective clothing (see Section 8).

Measures to prevent fire:
This product is not flammable. No special fire protection measures are necessary.

Advice on general occupational hygiene:
Avoid contact with skin, eyes and clothes. Provide eye shower and label its location conspicuously. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing immediately. Wash contaminated clothing prior to re-use.

7.2 Conditions for safe storage, including any incompatibilities

Store under specified conditions.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS – PERSONAL PROTECTION

8.1 Control parameters

Limit value type (country of origin)	Substance name	EC-No. CAS No.	Occupational exposure limit value		Monitoring and observation processes	Peak limitation	Source
			Long term	Short term			
IOELV (EU)	Ethanediol	203-473-3 / 107-21-1	52 mg/m3, 20 ppm; skin	104 mg/m3, 40 ppm; skin			2000/39/EC
AGW (DE)	Ethanediol	203-473-3 / 107-21-1	26 mg/m3, 10 ml/m3 2(I); DFG; EU, H, Y, 11				TRGS 900

8.2 Exposure controls

Personal Protection

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Change contaminated clothing.

Eye/face protection: Safety glasses that comply with appropriate standards, such as EN166.

Skin protection:

Full contact: Glove material: Nitrile rubber
Glove thickness: 0.11 mm Break through time: > 480 min
Splash contact: Glove material: Nitrile rubber
Glove thickness: 0.11 mm Break through time: > 480 min
The protective gloves to be used must comply with the specifications of Regulation (EU) 2016/425 and the related standard EN374. This recommendation applies only to the product stated in this safety data sheet and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

(a) Physical state:	see EU-SDS of individual components
(b) Color:	see EU-SDS of individual components
(c) Odor:	Odorless
(d) Melting point / freezing point:	No data available
(e) Initial boiling point and boiling range:	No data available
(f) Flammability (solid, gas):	Not applicable, mixture is not flammable
(g) Upper/lower flammability or explosive limits:	Not applicable, mixture is neither flammable nor explosive
(h) Flash point:	No data available
(i) Autoignition temperature:	Not applicable, mixture is not ignitable
(j) Decomposition temperature:	No data available
(k) pH:	see EU-SDS of individual components
(l) Kinematic viscosity:	No data available
(m) Water solubility:	No data available
(n) Partition coefficient: n-octanol/water:	No data available
(o) Vapor pressure:	No data available
(p) Density:	see EU-SDS of individual components
(q) Relative vapor pressure:	No data available
(r) Particle characteristics:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

No specific conditions to avoid.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: Mixture
No data available

Acute toxicity: Ingredients
Sulfuric Acid:
LD50 Oral - Rat - male and female - 2,140 mg/kg
Ethanediol:
Oral LD50: > 4500 mg/kg (rat)
Dermal LD50: > 3500 mg/kg (mouse)
2-methyl-2H-isothiazol-3-one hydrochloride:
LD50 Oral (Rat, female): 175 mg/kg
Method: OECD Test Guideline 425
Acute toxicity estimate: 175 mg/kg
Method: ATE value derived from LD50/LC50 value
LC50 Inhalation (Rat, male and female): 0,11 mg/l Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: Corrosive to the respiratory tract.
Remarks: Based on data from similar materials
The value is given in analogy to the following substances: 2-methylisothiazol-3(2H)-one
Method: ATE value derived from LD50/LC50 value
LD50 Dermal (Rat, male): 246 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials
The value is given in analogy to the following substances: 2-methylisothiazol-3(2H)-one
Method: ATE value derived from LD50/LC50 value
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):
Oral LD50: 53 mg/kg (rat)

Skin corrosion/irritation: Mixture
No data available

Skin corrosion/irritation: Ingredients

Sulfuric Acid:

Skin – Rabbit: Strongly corrosive and destructive to tissue.
TMB one:

Moderate irritation

2-methyl-2H-isothiazol-3-one hydrochloride:

Causes severe burns
Method: OECD Test Guideline 431

Ethanediol:
No irritant effects
2-methyl-2H-isothiazol-3-one hydrochloride:

Causes severe burns

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H - isothiazol-3-one [EC no. 220-239-6] (3:1):
Skin - Rabbit; Result: Corrosive

Serious eye damage/irritation: Mixture
2-methyl-2H-isothiazol-3-one hydrochloride:

Vapours may cause irritation to the eyes, respiratory system and the skin.

Serious eye damage/irritation: Ingredients
Sulfuric Acid:
Causes serious eye damage.
TMB one:

Moderate irritation

Ethanediol:
Slight irritation
2-methyl-2H-isothiazol-3-one hydrochloride:

Risk of serious damage to eyes.

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H - isothiazol-3-one [EC no. 220-239-6] (3:1):
Eyes - Rabbit; Result: Corrosive to eyes

Respiratory or skin sensitisation: Mixture
May cause an allergic skin reaction

Respiratory or skin sensitisation: Ingredients
Ethanediol:
No sensitising effects known
2-methyl-2H-isothiazol-3-one hydrochloride:
Causes sensitisation
Method: OECD Test Guideline 429, Local lymph node assay (LLNA)
Method: OECD Test Guideline 406, Maximisation Test on guinea pig

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H - isothiazol-3-one [EC no. 220-239-6] (3:1):
SCL: Skin Corr. 1B; H314: C ≥ 0.6 %; Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 %; Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 %; Skin Sens. 1; H317: C ≥ 0.0015 %

Germ cell mutagenicity:
No data available

Carcinogenicity:
There are no data available for the ingredients.

Reproductive toxicity:
There are no data available for the ingredients.

Specific target organ toxicity (single exposure):
There are no data available for the ingredients.

Specific target organ toxicity (repeated exposure):
Ethanediol: May cause damage to kidneys through prolonged or repeated exposure if swallowed.

Aspiration hazard:
There are no data available for the ingredients.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Sulfuric acid: Water Flea Data: Daphnia magna EC50=29 mg/L (24 h)
There are no data available for Ethanediol.
2-methyl-2H-isothiazol-3-one hydrochloride:

Fish : LC50 (96 h) (Oncorhynchus mykiss (rainbow trout)): 4,77 mg/l
Daphnia and other aquatic invertebrates : EC50 (48 h) (Daphnia magna (Water flea)): 2,33 mg/l
Algae/aquatic plants: ErC50 (72 h) (Pseudokirchneriella subcapitata (green algae)): 0,289 mg/ml
Daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: (21 d) 0,0442 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):
Fish: LC50 (96 h), 0.19 mg/l
Crustaceans: LC50 (48 h), 0.56 mg/l
Crustaceans: EC50 (48 h), 0.18 mg/l
Algae: EC50 (72 h), 0.13 mg/l
Algae: EC50 (96 h), 0.06 mg/l

12.2 Persistence and degradability

2-methyl-2H-isothiazol-3-one hydrochloride (28 d): Not readily biodegradable.

12.3 Bioaccumulative potential

2-methyl-2H-isothiazol-3-one hydrochloride: No bioaccumulation is to be expected (log Pow <=4).

12.4 Mobility in soil

There are no data available for the ingredients.

12.5 Results of PBT and vPvB assessment

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine

Endocrine disrupting properties
This mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects:

There are no data available for the ingredients.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Product / Packaging disposal: Handle uncleaned containers like the product itself.

SECTION 14: TRANSPORTATION INFORMATION

14.1 UN number (ADR, RID, ADN, IMDG, IATA)

2796

14.2 UN proper shipping name (ADR, RID, ADN, IMDG, IATA)

Diluted sulfuric acid

14.3 Transport hazard class(es) (ADR, RID, ADN, IMDG, IATA)

8A (Corrosive Substances that cause severe skin burns)

14.4 Packing group (ADR, RID, ADN, IMDG, IATA)

II (Medium Danger)

14.5 Environmental hazards

Sulfuric acid is harmful to the environment, especially to aquatic life. Improper disposal can cause damage to water organisms. Avoid unintended release into water or soil.

14.6 Special precautions for user

Ensure that appropriate personal protective equipment (such as acid-resistant clothing, gloves, goggles, and respiratory protection) is worn during transport and handling.
Avoid direct skin or eye contact.
Store the product in a secure, well-ventilated area and keep it away from sensitive materials.
Ensure that all vehicles and containers transporting sulfuric acid (0.5 M) are properly labeled and securely sealed.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Sulfuric acid may only be transported in bulk in accordance with the provisions for transporting hazardous liquids in bulk under MARPOL 73/78 and the International Bulk Chemical (IBC) Code. Appropriate measures and precautions must be taken to ensure safety during bulk transport.

SECTION 15: REGULATORY INFORMATION

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

Authorisations and/or restrictions on use:
Water Hazard Class 1, (Self-classification carried out according to VwVwS, 4. German Regulation)
Storage Class 12 (Self-classification carried out according to TRGS510. German Regulation)

German Water Hazard Classes: Sulfuric acid <5%: hazard class 1 - low hazard to waters hazard class 2 - hazard to waters.

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

All chemicals may pose unknown hazards and should be used with cautions. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide for experienced personnel. BioGenes GmbH assumes no responsibility for the completeness or accuracy of the information contained herein. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and protection of the environment.

Abbreviations and acronyms:
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS No: Chemical Abstracts Service number
CLP: Classification Labelling and Packaging Regulation
EC: European Commission
EC No: European Chemical number: EINECS, ELINCS or NLP
EEC: European Economic Community
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
EU: European Union
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG: International Maritime Dangerous Goods
LD50: Lethal dose, 50%
LC50: Lethal concentration, 50%
EC50: Half maximal effective concentration
NOEC: No observed effect concentration
ErC50: average inhibitory concentration of the growth rate
MARPOL: Marine Pollution
NLP: No-longer Polymers
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SCL: Specific Concentration Limit
UN: United Nations
VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Regulation for water hazardous substances, German regulation)

Full text of H-Statements referred to under section 3

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Eye Dam.	Eye damage
Eye Irrit.	Eye irritation
Resp. Sens.	Respiratory sensitisation
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitisation
Met. Corr.	Metal corrosion
STOT SE	Specific target organ toxicity single exposure
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

End of EU Safety Data Sheet