02.06.2023	Kit Components	
Product code	Description	
ITC59081	IMTEC-Cardiolipin-Antibodies IgM	
Components:		
ITC59081 [CAL]	Calibrators IgM 1 - 5	
ITC59081 [NC]	Negative Control Serum	
ITC59081 [PC]	Positive Control Serum	
ITC59081 [WASH][20x]	Washing Buffer (Concentrate 20x)	
ITC59081 [DIL]	Dilution Buffer	
ITC59081 [CON]	Conjugate Solution	
ITC59081 [SUB]	TMB Solution	
ITC59081 [STOP]	Stop Solution	
ITC59081 [MTP]	Mikrotiter Plate	

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.06.2023

Version number 6 (replaces version 5)

Revision: 02.06.2023

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

· 1.1 Product identifier

- · Trade name: Calibrators IgM 1 5
- · Article number: ITC59081 [CAL]
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · Application of the substance / the mixture In Vitro Diagnostic
- · 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

- Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0
- · 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availibility 24h per day (in german and english)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void

· Hazard statements Void

- · Precautionary statements
- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.

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.
- P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
- P401 Store in accordance with local/regional/national/international regulations.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

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Printing date 02.06.2023

Version number 6 (replaces version 5)

Revision: 02.06.2023

Trade name: Calibrators IgM 1 - 5

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

• **Description:** Serum, human origin, liquid

· Dangerous components: Void

• 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: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:

In case of contact, immediately flush with plenty of water. Consult doctor in case of complaints.

- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- . 6.2 Environmental precautions: 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).
- 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 No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.

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Printing date 02.06.2023

Version number 6 (replaces version 5)

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Trade name: Calibrators IgM 1 - 5

(Contd. of page 2)

• Further information about storage conditions:

No further requirements.

Keep container tightly sealed.

• 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

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.

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

- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Not required.
- Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information
- · Colour:
- · Odour:
- Odour threshold:
- Melting point/freezing point:
- Boiling point or initial boiling point and boiling range
- · Flammability
- · Lower and upper explosion limit
- · Lower:
- · Upper:
- · Flash point:
- · Auto-ignition temperature:

Red Odourless No information available. 0 °C

100 °C (CAS: 7732-18-5 water, distilled, conductivity or of similar purity) No information available.

No information available. No information available. Not applicable. No information available.

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Trade name: Calibrators IgM 1 - 5

	(Contd. of page
· Decomposition temperature:	No information available.
pH at 20 °C	7.5
· Viscosity:	
Kinematic viscosity	No information available
Dynamic at 20 °C:	0.952 mPas
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	No information available.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1 g/cm³
· Relative density	No information available.
· Vapour density	No information available.
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of health a	
environment, and on safety.	10
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	Froduct does not present an explosion hazard.
Water:	97.9 %
Solids content:	0.9 %
Molecular weight	18.02 g/mol
Change in condition Evaporation rate	No information available.
•	
Information with regard to physical haza	rd
classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammabl	
gases in contact with water	Void
	Void
· Oxidising liquids	
Oxidising solids	Void
Oxidising solids Organic peroxides	Void Void
Oxidising solids	

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

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Printing date 02.06.2023

Version number 6 (replaces version 5)

Revision: 02.06.2023

Trade name: Calibrators IgM 1 - 5

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- [·] 10.2 Chemical stability
- 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** No further relevant information available.
- **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.
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · 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.
- · Additional toxicological information:

All sera or plasmas used to prepare the calibrator have been tested for the presence of HBsAg as well as HIV and HCV antibodies and found to be negative by validated methods. Since no test method can ultimately rule out the presence of infectious agents, the material should be considered potentially infectious.

11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 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: No further relevant indications
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system.

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Trade name: Calibrators IgM 1 - 5

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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.

· European waste catalogue

18 01 03* wastes whose collection and disposal is subject to special requirements in order to prevent infection

· 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, ADN, IMDG, IATA 	not regulated	
 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	not regulated	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	not regulated	
· 14.4 Packing group · ADR, IMDG, IATA	not regulated	
 14.5 Environmental hazards: Marine pollutant: 	No	
• 14.6 Special precautions for user	Not applicable.	
 14.7 Maritime transport in bulk according t instruments 	to IMO Not applicable.	
· Transport/Additional information:		
· ADR · Limited quantities (LQ)	not regulated	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

 $^{\cdot}$ 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

- Precautionary statements
- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.

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Use personal protective equipment as required.		
53 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].		
 38 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 		
Take off immediately all contaminated clothing and wash it before reuse.		
Store in accordance with local/regional/national/international regulations.		
Dispose of contents/container in accordance with local/regional/national/international regulations.		
18/EU		
ous substances - ANNEX I None of the ingredients is listed.		
11/65/EU on the restriction of the use of certain hazardous substances in electrical and		
pment – Annex II		
None of the ingredients is listed.		
(EU) 2019/1148		
FRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing (3))		
None of the ingredients is listed.		
ORTABLE EXPLOSIVES PRECURSORS		
None of the ingredients is listed.		
· Regulation (EC) No 273/2004 on drug precursors		
None of the ingredients is listed.		
C) No 111/2005 laying down rules for the monitoring of trade between the Community tries in drug precursors		
edients is listed.		

• **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Version number of previous version: 5

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)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative



Printing date 02.06.2023

Version number 6 (replaces version 5)

Revision: 02.06.2023

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

· 1.1 Product identifier

Trade name: Negative Control Serum

- · Article number: ITC59081 [NC]
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture In Vitro Diagnostic
- 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

- Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0
- · 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availibility 24h per day (in german and english)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void

· Hazard statements Void

- Precautionary statements
- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.

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.

- P337+P313 If eye irritation persists: Get medical advice/attention.
- P401 Store in accordance with local/regional/national/international regulations.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

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Version number 6 (replaces version 5)

Revision: 02.06.2023

Trade name: Negative Control Serum

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:** Serum, human origin, liquid

· Dangerous components: Void

• 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: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:

In case of contact, immediately flush with plenty of water. Consult doctor in case of complaints.

- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- . 6.2 Environmental precautions: 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).
- 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 No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.

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Version number 6 (replaces version 5)

Revision: 02.06.2023

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Trade name: Negative Control Serum

(Contd. of page 2)

• Further information about storage conditions:

No further requirements.

Keep container tightly sealed.

•7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

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.

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

- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Not required.
- · Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Colour:
- Odour:
- Odour threshold:
- Melting point/freezing point:
- Boiling point or initial boiling point and boiling range
- · Flammability
- · Lower and upper explosion limit
- · Lower:
- · Upper:
- · Flash point:
- · Auto-ignition temperature:

Red Odourless No information available. 0 °C

100 °C (CAS: 7732-18-5 water, distilled, conductivity or of similar purity) No information available.

No information available. No information available. Not applicable. No information available.

⁽Contd. on page 4)



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Revision: 02.06.2023

Trade name: Negative Control Serum

	(Contd. of page
Decomposition temperature:	No information available.
pH at 20 °C	7.3-7.7
Viscosity:	
Kinematic viscosity	No information available
Dynamic at 20 °C:	0.952 mPas
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	No information available.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1 g/cm³
Relative density	No information available.
Vapour density	No information available.
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of health an	
environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Water:	97.5 %
Solids content:	0.9 %
Molecular weight	18.02 g/mol
Change in condition	10.02 g/mor
Evaporation rate	No information available.
Information with regard to physical hazar	d
classes	-
C103355	
	Void
Explosives	Void Void
Explosives Flammable gases	
Explosives Flammable gases Aerosols	Void Void
Explosives Flammable gases Aerosols Oxidising gases	Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure	Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids	Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids	Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures	Void Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids	Void Void Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids	Void Void Void Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids	Void Void Void Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures, which emit flammable	Void Void Void Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures, which emit flammable gases in contact with water	Void Void Void Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures, which emit flammable gases in contact with water Oxidising liquids	Void Void Void Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures, which emit flammable gases in contact with water Oxidising liquids Oxidising solids	Void Void Void Void Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures, which emit flammable gases in contact with water	Void Void Void Void Void Void Void Void

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

(Contd. on page 5)



Printing date 02.06.2023

Version number 6 (replaces version 5)

Revision: 02.06.2023

Trade name: Negative Control Serum

(Contd. of page 4)

- · 10.2 Chemical stability
- 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** No further relevant information available.
- **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.
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- 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.
- · Additional toxicological information:

Each donor unit used in the preparation of negative control material [NC] has been tested and found nonreactive for the presence of HBsAg, anti-HCV and anti-HIV-1/HIV-2 (EN 13641). However, no known test method can offer complete assurance that products derived from human blood will not transmit Hepatitis, HIV or any other infectious agents. Therefore adequate safety precautions are recommended.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 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: No further relevant indications
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system.

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Version number 6 (replaces version 5)

Revision: 02.06.2023

Trade name: Negative Control Serum

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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.

· European waste catalogue

18 01 03* wastes whose collection and disposal is subject to special requirements in order to prevent infection

· 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, ADN, IMDG, IATA 	not regulated	
 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	not regulated	
 14.3 Transport hazard class(es) 		
· ADR, ADN, IMDG, IATA · Class	not regulated	
· 14.4 Packing group · ADR, IMDG, IATA	not regulated	
 14.5 Environmental hazards: Marine pollutant: 	No	
· 14.6 Special precautions for user	Not applicable.	
 14.7 Maritime transport in bulk according to instruments 	Not applicable.	
· Transport/Additional information:		
· ADR · Limited quantities (LQ)	not regulated	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

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

- Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void

· Signal word Void

· Hazard statements Void

- Precautionary statements
- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.

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Trade name: Negative Control Serum

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Version number of previous version: 5

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)

- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative



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Version number 6 (replaces version 5)

Revision: 02.06.2023

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

· 1.1 Product identifier

· Trade name: Positive Control Serum

- · Article number: ITC59081 [PC]
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- Application of the substance / the mixture In Vitro Diagnostic
- 1.3 Details of the supplier of the safety data sheet

Manufacturor/Supplier

• **Manufacturer/Supplier:** HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

- Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0
- · 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availibility 24h per day (in german and english)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void

· Hazard statements Void

· Precautionary statements

- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.

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.

- P337+P313 If eye irritation persists: Get medical advice/attention.
- P401 Store in accordance with local/regional/national/international regulations.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

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Trade name: Positive Control Serum

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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:** Serum, human origin, liquid

· Dangerous components: Void

• 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: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:

In case of contact, immediately flush with plenty of water. Consult doctor in case of complaints.

- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- . 6.2 Environmental precautions: 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).
- 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 No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.

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Trade name: Positive Control Serum

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• Further information about storage conditions:

No further requirements.

Keep container tightly sealed.

7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

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.

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

- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Not required.
- Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information
- · Colour:
- Odour:
- Odour threshold:
- Melting point/freezing point:
- Boiling point or initial boiling point and boiling range
- · Flammability
- · Lower and upper explosion limit
- · Lower:
- · Upper:
- · Flash point:
- · Auto-ignition temperature:

Red Odourless No information available. 0 °C

100 °C (CAS: 7732-18-5 water, distilled, conductivity or of similar purity) No information available.

No information available. No information available. Not applicable. No information available.

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Trade name: Positive Control Serum

	(Contd. of page
Decomposition temperature:	No information available.
pH at 20 °C	7.3-7.7
Viscosity:	
Kinematic viscosity	No information available
Dynamic at 20 °C:	0.952 mPas
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	No information available.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1 g/cm³
Relative density	No information available.
Vapour density	No information available.
· ·	
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of health ar	nd
environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Water:	97.8 %
Solids content:	0.9 %
Molecular weight	18.02 g/mol
Change in condition	10.02 g/mor
Evaporation rate	No information available.
Information with regard to physical hazar	
classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable liquids Flammable solids	
	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable	
Substances and mixtures, which emit flammable gases in contact with water	Void
Substances and mixtures, which emit flammable	
Substances and mixtures, which emit flammable gases in contact with water Oxidising liquids Oxidising solids	Void
Substances and mixtures, which emit flammable gases in contact with water Oxidising liquids	Void Void
Substances and mixtures, which emit flammable gases in contact with water Oxidising liquids Oxidising solids	Void Void Void

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

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Trade name: Positive Control Serum

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- · 10.2 Chemical stability
- 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** No further relevant information available.
- **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.
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- 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.
- Additional toxicological information:

Positive control [PC] is prepared from inactivated blood of positive donors. However, heat inactivation at 56 °C cannot offer complete assurance that the product will not transmit infectious agents. Adequate safety precautions are highly recommended. All products derived from human blood should be treated as potentially infectious.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 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: No further relevant indications
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system.

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Printing date 02.06.2023

Version number 6 (replaces version 5)

Trade name: Positive Control Serum

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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.

· European waste catalogue

18 01 03* wastes whose collection and disposal is subject to special requirements in order to prevent infection

· 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, ADN, IMDG, IATA 	not regulated	
 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	not regulated	
 14.3 Transport hazard class(es) 		
· ADR, ADN, IMDG, IATA · Class	not regulated	
 14.4 Packing group ADR, IMDG, IATA 	not regulated	
 14.5 Environmental hazards: Marine pollutant: 	No	
· 14.6 Special precautions for user	Not applicable.	
• 14.7 Maritime transport in bulk according to IMO instruments Not applicable.		
· Transport/Additional information:		
· ADR · Limited quantities (LQ)	not regulated	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

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

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

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

- Precautionary statements
- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.

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P281	Use personal protective equipment as required.
P303+P361+P35	3 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P33	8 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P401	Store in accordance with local/regional/national/international regulations.
P501	Dispose of contents/container in accordance with local/regional/national/international
F301	regulations.
· Directive 2012/1	8/EU
• Named dangero	us substances - ANNEX I None of the ingredients is listed.
· DIRECTIVE 2011	I/65/EU on the restriction of the use of certain hazardous substances in electrical and
electronic equip	ment – Annex II
None of the ingre	dients is listed.
· REGULATION (E	EU) 2019/1148
• Annex I - REST under Article 5(3	RICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing 3))
None of the ingre	dients is listed.
· Annex II - REPO	RTABLE EXPLOSIVES PRECURSORS
None of the ingre	dients is listed.
· Regulation (EC)	No 273/2004 on drug precursors
None of the ingre	dients is listed.
	No 111/2005 laying down rules for the monitoring of trade between the Community ries in drug precursors
None of the ingre	dients is listed.

• **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Version number of previous version: 5

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)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.06.2023

Version number 6 (replaces version 5)

Revision: 02.06.2023

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

· 1.1 Product identifier

· Trade name: Washing Buffer (Concentrate 20x)

- · Article number: ITC59081 [WASH][20x]
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · Application of the substance / the mixture In Vitro Diagnostic
- · 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

- Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0
- · 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availability 24h per day (in german and english)

SECTION 2: Hazards identification

• 2.1 Classification of the substance or mixture

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

Skin Sens. 1 H317 May cause an allergic skin reaction.

· 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



· Signal word Warning

- · Hazard-determining components of labelling:
- 2-Methyl-2H-isothiazol-3-on
- Hazard statements
- H317 May cause an allergic skin reaction.
- Precautionary statements
- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.

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.

- P337+P313 If eye irritation persists: Get medical advice/attention.
- P401 Store in accordance with local/regional/national/international regulations.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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Trade name: Washing Buffer (Concentrate 20x)

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· 2.3 Other hazards

Results of PBT and vPvB assessment

· PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

· vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances in aqueous solution.

· Dangerous components:		
CAS: 77-86-1 EINECS: 201-064-4	TRIS	≤2.5%
CAS: 2682-20-4	2-Methyl-2H-isothiazol-3-on Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); Skin Sens. 1A, H317, EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.0015 %	≥0.1-<0.25%
· Additional informat	tion: For the wording of the listed hazard phrases refer to section 16.	·

SECTION 4: First aid measures

· 4.1 Description of first aid measures

• After inhalation: Supply fresh air; consult doctor in case of complaints.

• After skin contact:

- In case of contact, immediately flush with plenty of water. Consult doctor in case of complaints.
- · After eye contact: Rinse opened eye for several minutes under running water.

· After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

- No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters

· Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures Not required.

• 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

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Revision: 02.06.2023

Trade name: Washing Buffer (Concentrate 20x)

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- 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 6.4 Reference to other sections

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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 No special precautions are necessary if used correctly.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

No further requirements.

Keep container tightly sealed.

· 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

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.

- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Respiratory protection: Not required.

Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 Goggles recommended during refilling

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Trade name: Washing Buffer (Concentrate 20x)

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SECTION 9: Physical and chemical prop	erties
9.1 Information on basic physical and chemical p	properties
General Information	
· Colour:	Colourless
· Odour:	Odourless
Odour threshold:	No information available.
 Melting point/freezing point: 	No information available.
Boiling point or initial boiling point and boiling	
range	100 °C (CAS: 7732-18-5 water, distilled, conductivit
	or of similar purity)
· Flammability	No information available.
• Lower and upper explosion limit	
· Lower:	No information available.
· Upper:	No information available.
· Flash point:	Not applicable.
Auto-ignition temperature:	No information available.
· Decomposition temperature:	No information available.
· pH at 20 °C	6.7-7.1
· Viscosity:	
· Kinematic viscosity	No information available
Dynamic:	No information available.
Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	No information available.
· Vapour pressure at 20 °C:	23 hPa
· Density and/or relative density	23 m a
· Density at 20 °C:	1 g/cm³
· Relative density	No information available.
· Vapour density	No information available.
• 9.2 Other information	
Appearance:	12
Form:	Liquid
Important information on protection of health an	d
environment, and on safety.	—
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Water:	79.9 %
· Solids content:	17.9 %
· Change in condition	
· Evaporation rate	No information available.
·Information with regard to physical hazar	d
classes	
·Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void

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Trade name: Washing Buffer (Concentrate 20x)

		(Contd. of page
Pyrophoric liquids	Void	
Pyrophoric solids	Void	
Self-heating substances and mixtures	Void	
Substances and mixtures, which emit flamm	nable	
gases in contact with water	Void	
Oxidising liquids	Void	
Oxidising solids	Void	
Organic peroxides	Void	
Corrosive to metals	Void	
Desensitised explosives	Void	

SECTION 10: Stability and reactivity

• **10.1 Reactivity** No further relevant information available.

- · 10.2 Chemical stability
- 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 No further relevant information available.
- 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.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)			
Oral	LD50	52,632 mg/kg	
	LD50	52,632 mg/kg 157,895 mg/kg	
Inhalative	LC50/4 h	26.3 mg/l	

CAS: 77-86-1 TRIS

040.77-0		
Oral	LD50	5,900 mg/kg (rat)
CAS: 2682	2-20-4 2-M	lethyl-2H-isothiazol-3-on
Oral	LD50	100 mg/kg (ATE)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4 h	0.05 mg/l (ATE)
		tion Deced on eventleble date the electification entropy and next

• Skin corrosion/irritation Based on available data, the classification criteria are not met.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation May cause an allergic skin reaction.
- 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.

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· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 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: No further relevant indications
- · 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.

European waste catalogue

18 01 06* chemicals consisting of or containing hazardous substances

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

SECTION 14: Transport informati	on	
 14.1 UN number or ID number ADR, ADN, IMDG, IATA 	not regulated	
 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	not regulated	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	not regulated	
 14.4 Packing group ADR, IMDG, IATA 	not regulated	
		(Contd. on page 7)



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		(Contd. of pag
 14.5 Environmental hazards: Marine pollutant: 	No	
[·] 14.6 Special precautions for user	Not applicable.	
 14.7 Maritime transport in bulk according instruments 	g to IMO Not applicable.	
· Transport/Additional information:		
· ADR · Limited quantities (LQ)	not regulated	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008
- The product is classified and labelled according to the CLP regulation.

Hazard pictograms



· Signal word Warning

- · Hazard-determining components of labelling:
- 2-Methyl-2H-isothiazol-3-on
- Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

Keep only in original packaging. P234 P260 Do not breathe dust/fume/gas/mist/vapours/spray. P262 Do not get in eyes, on skin, or on clothing. P281 Use personal protective equipment as required. 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. P337+P313 If eye irritation persists: Get medical advice/attention. P401 Store in accordance with local/regional/national/international regulations. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. · Directive 2012/18/EU Named dangerous substances - ANNEX I None of the ingredients is listed. · 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.

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IF



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.06.2023

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3

3

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.

Regulation (EC) No 273/2004 on drug precursors

CAS: 7647-01-0 hydrogen chloride

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

CAS: 7647-01-0 hydrogen chloride

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

- Toxic if swallowed. H301
- Toxic in contact with skin. H311
- 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.
- H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- EUH071 Corrosive to the respiratory tract.

· Version number of previous version: 5

· 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) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Acute Tox. 3: Acute toxicity - Category 3 Acute Tox. 2: Acute toxicity – Category 2 Skin Corr. 1B: Skin corrosion/irritation – Category 1B Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2 Skin Sens. 1: Skin sensitisation - Category 1 Skin Sens. 1A: Skin sensitisation - Category 1A STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1



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Version number 6 (replaces version 5)

Revision: 02.06.2023

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

· 1.1 Product identifier

· Trade name: Dilution Buffer

- Article number: ITC59081 [DIL]
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · Application of the substance / the mixture In Vitro Diagnostic
- · 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

- Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0
- · 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availibility 24h per day (in german and english)

SECTION 2: Hazards identification

[•] 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void

· Hazard statements Void

· Precautionary statements

- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.

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.

- P337+P313 If eye irritation persists: Get medical advice/attention.
- P401 Store in accordance with local/regional/national/international regulations.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

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Version number 6 (replaces version 5)

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Trade name: Dilution Buffer

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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

• **Description:** Mixture of substances in aqueous solution.

· Dangerous components: Void

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: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:

In case of contact, immediately flush with plenty of water. Consult doctor in case of complaints.

- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- . 6.2 Environmental precautions: 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).
- 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 No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.

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• Further information about storage conditions:

No further requirements.

Keep container tightly sealed.

•7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

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.

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

- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Not required.
- Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information
- · Colour:
- Odour:
- Odour threshold:
- Melting point/freezing point:
- Boiling point or initial boiling point and boiling range
- · Flammability
- · Lower and upper explosion limit
- · Lower:
- · Upper:
- · Flash point:
- · Auto-ignition temperature:

Red Odourless No information available. 0 °C

100 °C (CAS: 7732-18-5 water, distilled, conductivity or of similar purity) No information available.

No information available. No information available. Not applicable. No information available.

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	(Contd. of page
Decomposition temperature:	No information available.
pH at 20 °C	7.1-7.5
Viscosity:	
Kinematic viscosity	No information available
Dynamic at 20 °C:	0.952 mPas
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	No information available.
· Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1 g/cm³
· Relative density	No information available.
· Vapour density	No information available.
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of health and	
environment, and on safety.	u
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	r roddet does not present an explosion nazard.
Water:	97.1 %
Solids content:	1.8 %
Molecular weight	18.02 g/mol
Change in condition	18.02 g/mor
• Evaporation rate	No information available.
Information with regard to physical hazard	
classes	и —
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable	
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

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Trade name: Dilution Buffer

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- · 10.2 Chemical stability
- 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** No further relevant information available.
- **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.
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · 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.
- · Additional toxicological information:

This product contains components from animal origin. Being of non-primate origin, these components avoid most of the risks associated with components based on human origin (e.g. Hepatitis B and C and HIV). Nevertheless this product should be handled as if potentially infectious.

· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 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: No further relevant indications
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system.

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Version number 6 (replaces version 5)

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Trade name: Dilution Buffer

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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.

· European waste catalogue

18 01 03* wastes whose collection and disposal is subject to special requirements in order to prevent infection

· 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, ADN, IMDG, IATA 	not regulated		
 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	not regulated		
 14.3 Transport hazard class(es) 	· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	not regulated		
· 14.4 Packing group · ADR, IMDG, IATA	not regulated		
 14.5 Environmental hazards: Marine pollutant: 	No		
 14.6 Special precautions for user 	Not applicable.		
 14.7 Maritime transport in bulk according t instruments 	t o IMO Not applicable.		
· Transport/Additional information:			
· ADR · Limited quantities (LQ)	not regulated		
· UN "Model Regulation":	not regulated		

SECTION 15: Regulatory information

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

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

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

- Precautionary statements
- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.

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P281 Use personal protective equipment as required.		
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.		
P337+P313 If eye irritation persists: Get medical advice/attention.		
P401 Store in accordance with local/regional/national/international regulations.		
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.		
· Directive 2012/18/EU		
· Named dangerous substances - ANNEX I None of the ingredients is listed.		
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.		
· Regulation (EC) No 273/2004 on drug precursors		
None of the ingredients is listed.		
 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors 		
None of the ingredients is listed.		

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Version number of previous version: 5

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)

- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative



Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 6 (replaces version 5)

Revision: 02.06.2023

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

· 1.1 Product identifier

· Trade name: Conjugate Solution

- · Article number: ITC59081 [CON]
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · Application of the substance / the mixture In Vitro Diagnostic

· 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

- Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0
- · 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availibility 24h per day (in german and english)

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 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



· Signal word Warning

· Hazard-determining components of labelling:

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)

Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.
- 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.
- P337+P313 If eye irritation persists: Get medical advice/attention.

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Trade name: Conjugate Solution

(Contd. of page 1) P401 Store in accordance with local/regional/national/international regulations. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

• Results of PBT and vPvB assessment

· PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

· vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances in aqueous solution.

· Dangerous components:

Dangereae comp		
CAS: 55965-84-9	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-	≥0.0025-<0.025%
	500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	
	Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330;	
	📣 Skin Corr. 1C, H314; Eye Dam. 1, H318; 🚯 Aquatic Acute 1, H400	
	(Ň=100); Aquatic Chronic 1, H410 (M=100); ᡞ Skin Sens. 1A, H317	
	Specific concentration limits: Skin Corr. 1C; H 314 : C \ge 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 %	
· Additional inform	nation: For the wording of the listed hazard phrases refer to section 16.	

SECTION 4: First aid measures

· 4.1 Description of first aid measures

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

• 5.2 Special hazards arising from the substance or mixture No further relevant information available.

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5.3 Advice for firefighters

• Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions: 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). 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.

Prevent formation of aerosols.

· Information about fire - and explosion protection: No special measures required.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:

• Requirements to be met by storerooms and receptacles: No special requirements.

- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

No further requirements.

Keep container tightly sealed.

•7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

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.

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

- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

Immediately remove all solled and contaminated clothing Wash hands before breaks and at the end of work.

Respiratory protection:

Not required.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 Goggles recommended during refilling

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information · Colour: Yellowish · Odour: Odourless · Odour threshold: No information available. · Melting point/freezing point: No information available. Boiling point or initial boiling point and boiling 100 °C (CAS: 7732-18-5 water, distilled, conductivity range or of similar purity) · Flammability No information available. · Lower and upper explosion limit No information available. · Lower: · Upper: No information available. · Flash point: Not applicable. · Auto-ignition temperature: No information available. No information available. · Decomposition temperature: · pH at 20 °C 7.2 · Viscosity: · Kinematic viscosity No information available · Dynamic: No information available. · Solubility Fully miscible. · water: · Partition coefficient n-octanol/water (log value) No information available. · Vapour pressure at 20 °C: 23 hPa · Density and/or relative density Density at 20 °C: 1 g/cm³ · Relative density No information available. · Vapour density No information available.

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· 9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of healt	th and
environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Water:	75.3 %
Solids content:	0.7 %
Change in condition	
Evaporation rate	No information available.
Explosives	Void
Information with regard to physical ha	42414
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flamm	
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

• 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** No further relevant information available.
- · 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.

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· LD/LC50 values relevant for classification:		
CAS: 55965-84-9 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 100 mg/kg (ATE)		
Dermal LD50 50 mg/kg (ATE)		
Inhalative LC50/4 h 0.05 mg/l (ATE)		
 Skin corrosion/irritation Based on available data, the classification criteria are not met. Serious eye damage/irritation Based on available data, the classification criteria are not met. Respiratory or skin sensitisation May cause an allergic skin reaction. 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. Additional toxicological information: This product contains components from animal origin. Being of non-primate origin, these components avoid most of the risks associated with components based on human origin (e.g. Hepatitis B and C and HIV). Nevertheless this product should be handled as if potentially infectious. 11.2 Information on other hazards Endocrine disrupting properties 		
None of the ingredients is listed.		
SECTION 12: Ecological information		
 12.1 Toxicity Aquatic toxicity: No further relevant information available. 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: No further relevant indications General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system. 		
SECTION 13: Disposal considerations		
SECTION 13: Disposal considerations		
· 13 1 Waste treatment methods		

13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

18 01 03* wastes whose collection and disposal is subject to special requirements in order to prevent infection

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· 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, ADN, IMDG, IATA 	not regulated	
 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	not regulated	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	not regulated	
· 14.4 Packing group · ADR, IMDG, IATA	not regulated	
 14.5 Environmental hazards: Marine pollutant: 	No	
 14.6 Special precautions for user 	Not applicable.	
· 14.7 Maritime transport in bulk according to IM	10	
instruments	Not applicable.	
· Transport/Additional information:		
ADR		
· Limited quantities (LQ)	not regulated	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



· Signal word Warning

 Hazard-determining components of labelling: 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)

Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

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 Precautionary s 	tatements	
P234	Keep only in original packaging.	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.	
P262	Do not get in eyes, on skin, or on clothing.	
P281	Use personal protective equipment as required.	
	3 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].	
P305+P351+P33	8 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if	
	present and easy to do. Continue rinsing.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P401	Store in accordance with local/regional/national/international regulations.	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.	
· Directive 2012/1	8/EU	
	us substances - ANNEX I None of the ingredients is listed.	
	EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3	
	//65/EU on the restriction of the use of certain hazardous substances in electrical and	
electronic equip	oment – 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))		
\u03cm		
None of the ingredients is listed.		
· Annex II - REPORTABLE EXPLOSIVES PRECURSORS		
None of the ingredients is listed.		
· Regulation (EC) No 273/2004 on drug precursors		
None of the ingre	dients is listed.	
	No 111/2005 laying down rules for the monitoring of trade between the Community ries in drug precursors	
None of the ingredients is listed.		
· 15.2 Chemical s	afety assessment: A Chemical Safety Assessment has not been carried out.	

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

• Version number of previous version: 5

• 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

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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) LC50: Lethal concentration, 50 percent D50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Acute Tox. 3: Acute toxicity – Category 3 Acute Tox. 2: Acute toxicity – Category 2 Skin Corr. 1C: Skin corrosion/irritation – Category 1C Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Skin Sens. 1: Skin sensitisation – Category 1A Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1	(Contd. of page 8)
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3	



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

· 1.1 Product identifier

• Trade name: <u>TMB Solution</u>

- · Article number: ITC59081 [SUB]
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · Application of the substance / the mixture In Vitro Diagnostic

· 1.3 Details of the supplier of the safety data sheet

• Manufacturer/Supplier:

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

• Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0

· 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availability 24h per day (in german and english)

SECTION 2: Hazards identification

[•] 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.

· 2.2 Label elements

- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void

· Hazard statements Void

· Precautionary statements

- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.

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.

- P337+P313 If eye irritation persists: Get medical advice/attention.
- P401 Store in accordance with local/regional/national/international regulations.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

• **Description:** Mixture of substances in aqueous solution.

· Dangerous components:

CAS: 616-45-5 2-pyrrolidone Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 2.5-5%

• 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: No special measures required.

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:
- In case of contact, immediately flush with plenty of water. Consult doctor in case of complaints.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

• Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters

• Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.

• 6.2 Environmental precautions: 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).

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 No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:

• Requirements to be met by storerooms and receptacles: No special requirements.

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(Contd. of page 2) • Information about storage in one common storage facility: Store away from oxidising agents. • Further information about storage conditions:

No further requirements.

Keep container tightly sealed.

•7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

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.

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

· 8.2 Exposure controls

- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures: Do not eat, drink, smoke or sniff while working.
- Respiratory protection: Not required.

Hand protection

Protective gloves for handling chemicals must meet the requirements of the European standard EN 374.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Nitrile rubber, NBR

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

Penetration time (maximum wearing time): 480 min

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 Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- $^{\rm \cdot}$ 9.1 Information on basic physical and chemical properties
- · General Information
- · Colour:
- · Odour:
- Odour threshold:
- Melting point/freezing point:
- Boiling point or initial boiling point and boiling range
- · Flammability
- · Lower and upper explosion limit

· Lower:

Colourless Odourless No information available. 0 °C

100 °C (CAS: 7732-18-5 water, distilled, conductivity or of similar purity) No information available.

No information available.

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Upper:	No information available.
Flash point:	Not applicable.
Decomposition temperature:	No information available.
pH at 20 °C	3.7
Viscosity:	
Kinematic viscosity	No information available
Dynamic at 20 °C:	0.952 mPas
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value	e) No information available.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1 g/cm ³
Relative density	No information available.
Vapour density	No information available.
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of health	
environment, and on safety.	anu
	Draduat is not colfigniting
Ignition temperature:	Product is not selfigniting.
Explosive properties: Solvent content:	Product does not present an explosion hazard.
Water:	95.0 %
	0.0 %
Solids content:	
Molecular weight	18.02 g/mol
Change in condition Evaporation rate	No information available.
•	
Information with regard to physical haz classes	ard
Explosives	Void
	Void
Flammable gases Aerosols	Void
Oxidising gases	Void
••	Void
Gases under pressure Flammable liquids	
Flammable solids	Void Void
Self-reactive substances and mixtures	Vold Void
	Void
Pyrophoric liquids	
Pyrophoric solids	Void Void
Self-heating substances and mixtures	
Substances and mixtures, which smit flowers	
Substances and mixtures, which emit flammal	
gases in contact with water	Void
gases in contact with water Oxidising liquids	Void Void
gases in contact with water Oxidising liquids Oxidising solids	Void Void Void
gases in contact with water Oxidising liquids Oxidising solids Organic peroxides	Void Void Void Void
gases in contact with water Oxidising liquids Oxidising solids	Void Void Void

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SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

- 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
- Light sensitive.

Store away from heat.

Stable if the recommended storage and handling instructions are followed.

- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

 $^{\cdot}$ 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.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral LD50 6,694 mg/kg (rat)

CAS: 616-45-5 2-pyrrolidone

Oral LD50 328 mg/kg (rat)

Skin corrosion/irritation Based on available data, the classification criteria are not met.

- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- 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

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

- · Aquatic toxicity: No further relevant information available.
- 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: No further relevant indications

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General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system.

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.

· European waste catalogue

18 01 07 chemicals other than those mentioned in 18 01 06

· 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, ADN, IMDG, IATA 	not regulated	
 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	not regulated	
 14.3 Transport hazard class(es) 		
· ADR, ADN, IMDG, IATA · Class	not regulated	
 14.4 Packing group ADR, IMDG, IATA 	not regulated	
 14.5 Environmental hazards: Marine pollutant: 	Νο	
[·] 14.6 Special precautions for user	Not applicable.	
 14.7 Maritime transport in bulk according instruments 	g to IMO Not applicable.	
· Transport/Additional information:		
· ADR · Limited quantities (LQ)	not regulated	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

 $^{\circ}$ 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Labelling according to Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void

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· · · · · · · · · · · · · · · · · · ·	atements	
P234	Keep only in original packaging.	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.	
P262	Do not get in eyes, on skin, or on clothing.	
P281	Use personal protective equipment as required.	
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.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P401	Store in accordance with local/regional/national/international regulations.	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Directive 2012/18/EU Named dangerous substances - ANNEX I None of the ingredients is listed.		
Named dangerou	 is substances - ANNEX I None of the ingredients is listed. 65/EU on the restriction of the use of certain hazardous substances in electrical and 	
Named dangerou DIRECTIVE 2011/	is substances - ANNEX I None of the ingredients is listed. 65/EU on the restriction of the use of certain hazardous substances in electrical and nent – Annex II	
Named dangerou DIRECTIVE 2011/ electronic equipr	 Substances - ANNEX I None of the ingredients is listed. 65/EU on the restriction of the use of certain hazardous substances in electrical and nent – Annex II lients is listed. 	
Named dangerou DIRECTIVE 2011/ electronic equipr None of the ingrec REGULATION (El Annex I - RESTR	 65/EU on the restriction of the use of certain hazardous substances in electrical and nent – Annex II lients is listed. U) 2019/1148 ICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing 	
Named dangerou DIRECTIVE 2011/ electronic equipr None of the ingred REGULATION (El	 65/EU on the restriction of the use of certain hazardous substances in electrical and nent – Annex II lients is listed. U) 2019/1148 ICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing 	
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Named dangerou DIRECTIVE 2011/ electronic equipr None of the ingrec REGULATION (El Annex I - RESTR under Article 5(3) None of the ingrec	 Substances - ANNEX I None of the ingredients is listed. 65/EU on the restriction of the use of certain hazardous substances in electrical and nent – Annex II lients is listed. U) 2019/1148 ICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing) 	
Named dangerou DIRECTIVE 2011/ electronic equipr None of the ingrec REGULATION (El Annex I - RESTR under Article 5(3) None of the ingrec	Substances - ANNEX I None of the ingredients is listed. 65/EU on the restriction of the use of certain hazardous substances in electrical and nent – Annex II lients is listed. U) 2019/1148 ICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing) lients is listed. RTABLE EXPLOSIVES PRECURSORS	

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Version number of previous version: 5

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)
- LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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IE

Trade name: TMB Solution

Acute Tox. 4: Acute toxicity – Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

> HUMAN Diagnostics Worldwide

Printing date 02.06.2023

Version number 6 (replaces version 5)

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

· 1.1 Product identifier

• Trade name: <u>Stop Solution</u>

- · Article number: ITC59081 [STOP]
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · Application of the substance / the mixture In Vitro Diagnostic

· 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

• Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0

· 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availibility 24h per day (in german and english)

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

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

Skin Irrit. 2 H315 Causes skin irritation.

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



· Signal word Warning

- · Hazard-determining components of labelling:
- sulphuric acid
- Hazard statements
- H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.
- 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.
- P337+P313 If eye irritation persists: Get medical advice/attention.

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Trade name: Stop Solution

(Contd. of page 1) P401 Store in accordance with local/regional/national/international regulations. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

· vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

· Description: Mixture of substances in aqueous solution.

· Dangerous components:		
	sulphuric acid	≥2.5-<5%
EINECS: 231-639-5	Met. Corr.1, H290; Skin Corr. 1A, H314 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 15 %	
	Specific concentration limits: Skin Corr. 1A; H314: C ≥ 15 %	
	Skin Irrit. 2; H315: 5 % ≤ C < 15 %	
	Eye Irrit. 2; H319: 5 % ≤ C < 15 %	
• Additional information: For the wording of the listed bazard phrases refer to section 16		

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

• After inhalation: In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters

Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions: Dilute with plenty of water.

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6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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. Prevent formation of aerosols.

Prevent formation of aerosols.

· Information about fire - and explosion protection: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- No further requirements.

Keep container tightly sealed.

· 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

[•] Ingredients with limit values that require monitoring at the workplace:

CAS: 7664-93-9 sulphuric acid

OEL Long-term value: 0.05 mg/m³ IOELV

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

- · 8.2 Exposure controls
- 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 and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 4)

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Trade name: Stop Solution

(Contd. of page 3) Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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

SECTION 9: Physical and chemical properties

. Q.4. Information on basic physical and chamical properties		
 9.1 Information on basic physical and chemical properties General Information 		
· Colour:	Colourless	
· Odour:	Odourless	
· Odour threshold:	No information available.	
· Melting point/freezing point:	0 °C	
· Boiling point or initial boiling point and boiling	0.0	
range	100 °C (CAS: 7732-18-5 water, distilled, conductivity	
lange	or of similar purity)	
· Flammability	No information available.	
· Lower and upper explosion limit		
· Lower:	No information available.	
· Upper:	No information available.	
· Flash point:	Not applicable.	
· Auto-ignition temperature:	No information available.	
· Decomposition temperature:	No information available.	
· pH at 20 °C	<1	
· Viscosity:		
· Kinematic viscosity	No information available	
· Dynamic at 20 °C:	0.952 mPas	
Solubility		
water:	Fully miscible.	
 Partition coefficient n-octanol/water (log value) 	No information available.	
· Vapour pressure at 20 °C:	23 hPa	
Density and/or relative density		
· Density at 20 °C:	1.0233 g/cm ³	
· Relative density	No information available.	
· Vapour density	No information available.	
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	(Contd. of page
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of healt	h and
environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Water:	97.2 %
Solids content:	0.0 %
Molecular weight	18.02 g/mol
Change in condition	,
Evaporation rate	No information available.
classes	
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flamm	able
gases in contact with water	Void
Öxidising liquids	Void
Oxidising solids	Void
	Void
Organic peroxides Corrosive to metals	Void Void

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

• 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 No further relevant information available.
- \cdot 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.

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Trade name: Stop Solution

LD/LC50 values relevant for classification:

CAS: 7664-93-9 sulphuric acid

Inhalative inhalative 510 mg/m3 (rat)

Skin corrosion/irritation Causes skin irritation.

- 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

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 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: No further relevant indications
- General notes:
- Not hazardous for water.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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.

· European waste catalogue

18 01 06* chemicals consisting of or containing hazardous substances

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

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Trade name: Stop Solution

SECTION 14: Transport informa	ation	
14.1 UN number or ID number ADR, ADN, IMDG, IATA	not regulated	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	not regulated	
14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	not regulated	
· 14.4 Packing group · ADR, IMDG, IATA	not regulated	
· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
 14.7 Maritime transport in bulk accord instruments 	ding to IMO Not applicable.	
· Transport/Additional information:		
· ADR · Limited quantities (LQ)	not regulated	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 Labelling according to Regulation (EC) No 1272/2008
- The product is classified and labelled according to the CLP regulation.

Hazard pictograms



- · Signal word Warning
- · Hazard-determining components of labelling:
- sulphuric acid
- · Hazard statements
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

· Precautionary statements

- P234 Keep only in original packaging.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P281 Use personal protective equipment as required.
- 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.

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(Contd. of page 7) P337+P313 If eye irritation persists: Get medical advice/attention. P401 Store in accordance with local/regional/national/international regulations. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Directive 2012/18/EU · Named dangerous substances - ANNEX I None of the ingredients is listed. · 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. Regulation (EC) No 273/2004 on drug precursors CAS: 7664-93-9 sulphuric acid 3 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors CAS: 7664-93-9 sulphuric acid 3 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.

· Version number of previous version: 5

· 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Met. Corr.1: Corrosive to metals Category 1
- Skin Corr. 1A: Skin corrosion/irritation Category 1A Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation Category 2



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.06.2023

Version number 6 (replaces version 5)

Revision: 02.06.2023

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

· 1.1 Product identifier

· Trade name: Mikrotiter Plate

- Article number: ITC59081 [MTP]
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · Application of the substance / the mixture In Vitro Diagnostic
- · 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HUMAN Gesellschaft für Biochemica und Diagnostica mbH Max-Planck-Ring 21 65205 Wiesbaden Germany phone +49 (0) 6122 99 88 0 fax: +49 (0) 6122 99 88 100 eMail: human@human.de

- Further information obtainable from: Head office, phone: +49 (0) 6122 99 88 0
- · 1.4 Emergency telephone number:

INFRASERV, Telephone +49(0) 69-305-6418, availibility 24h per day (in german and english)

SECTION 2: Hazards identification

• 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.

· 2.2 Label elements

- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- Precautionary statements
- P234 Keep only in original packaging.
- P281 Use personal protective equipment as required.
- P401 Store in accordance with local/regional/national/international regulations.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- · 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT:

This substance/mixture does not contain components classified as either persistent, bioaccumulative and toxic (PBT) at concentrations of 0.1% or higher.

· vPvB:

This substance/mixture does not contain components classified as either very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: solid polystyrene strips, breakable, coated with recombinant antigen(s)
- · Dangerous components: Void
- Additional information: For the wording of the listed hazard phrases refer to section 16.

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Trade name: Mikrotiter Plate

(Contd. of page 1)

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:
- In case of contact, immediately flush with plenty of water. Consult doctor in case of complaints.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: Fire-fighters should wear appropriate protective equipment.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- 6.2 Environmental precautions: No special measures required.
- 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- · 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 No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- No further requirements.
- Keep container tightly sealed.
- · 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2, no other specific uses are foreseen

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Trade name: Mikrotiter Plate

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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.

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

· 8.2 Exposure controls

• Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• 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 Not required.

SECTION 9: Physical and chemical properties

Colour:	Colourless	
Odour:	Odourless	
Odour threshold:	No information available.	
Melting point/freezing point:	No information available.	
Boiling point or initial boiling point and bo	boiling	
range	No information available.	
Flammability	Not determined.	
Lower and upper explosion limit Lower: Upper: Flash point: Decomposition temperature: pH Viscosity:		
	No information available.	
	No information available.	
	Not applicable.	
	No information available.	
	Not applicable.	
Kinematic viscosity	Not applicable.	
Dynamic:	Not applicable.	
Solubility		
water:	Insoluble.	



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Trade name: Mikrotiter Plate

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	(Contd. of
Partition coefficient n-octanol/water (log value)	No information available.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density:	No information available.
Relative density	No information available.
Vapour density	Not applicable.
Particle characteristics	See section 3.
9.2 Other information	
Appearance:	
Form:	Solid
Important information on protection of health and	
environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Solids content:	100.0 %
Change in condition	
Evaporation rate	Not applicable.
nformation with regard to physical hazard	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable	
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

• **10.1 Reactivity** No further relevant information available.

10.2 Chemical stability

• 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 No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.

• 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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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.
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- 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

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 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: No further relevant indications
- General notes: Not hazardous for water.

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.

· European waste catalogue

18 01 07 chemicals other than those mentioned in 18 01 06

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, ADN, IMDG, IATA

not regulated

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 14.2 UN proper shipping name ADR, ADN, IMDG, IATA 	not regulated	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA		
· Class	not regulated	
 14.4 Packing group ADR, IMDG, IATA 	not regulated	
· 14.5 Environmental hazards:	Not applicable.	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Maritime transport in bulk according	g to IMO	
instruments	Not applicable.	
· Transport/Additional information:		
ADR		
 Limited quantities (LQ) 	not regulated	
· UN "Model Regulation":	not regulated	

SECTION 15: Regulatory information

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

· Labelling according to Regulation (EC) No 1272/2008 Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

· Precautionary statements

P234 Keep only in original packaging.

P281 Use personal protective equipment as required.

P401 Store in accordance with local/regional/national/international regulations.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Directive 2012/18/EU

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

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.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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(Contd. of page 6) • **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Version number of previous version: 5

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

