21.04.2020	Kit Components
Product code	Description
ITC59400	IMTEC-Phosphatidylethanolamine-Antibodies Screen
Components:	
ITC59400 [CAL]	Calibrators IgGAM 1 - 5
ITC59400 [NC]	Negative Control Serum
ITC59400 [PC]	Positive Control Serum
ITC59400 [WASH][20x]	Washing Buffer (Concentrate 20x)
ITC59400 [DIL]	Dilution Buffer
ITC59400 [CON]	Conjugate Solution
ITC59400 [SUB]	TMB Solution
ITC59400 [STOP]	Stop Solution
ITC59400 [MTP]	Mikrotiter strips

Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier · Trade name: Calibrators IgGAM 1 - 5 · Article number: ITC59400 [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. 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: Not applicable. · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- **Description:** Serum, human origin, liquid

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Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Calibrators IgGAM 1 - 5

(Contd. of page 1)

- · 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 Wear protective equipment. Keep unprotected persons away. Not required.
- 6.2 Environmental precautions: No special measures required.
- · 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.
- \cdot 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.

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Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Calibrators IgGAM 1 - 5

(Contd. of page 2)

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

- · 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
- · Personal protective equipment:
- · General protective and hygienic measures:

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

- · Respiratory protection: Not required.
- · Protection of hands:

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 protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical and	d chemical properties	
· Appearance:		
Form:	Liquid	
Colour:	Red	
· Odour:	Odourless	
 Odour threshold: 	Not determined.	
· pH-value at 20 °C:	7.5	
 Change in condition Melting point/freezing point: Initial boiling point and boiling range 	Undetermined. ge: 100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not applicable.	
· Ignition temperature:	Not determined.	
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Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Calibrators IgGAM 1 - 5

		(Contd. of page
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
· Density at 20 °C:	1 g/cm ³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Fully miscible.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
Water:	97.8 %	
· 9.2 Other information	No further relevant information available.	

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 toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · 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.
- 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.

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Trade name: Calibrators IgGAM 1 - 5

- · 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.

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.
- · Additional ecological information:
- General notes: Not hazardous for water.
- \cdot 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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 informat	ion	
· 14.1 UN-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	
		(Contd. on page 6)



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Calibrators IgGAM 1 - 5

		(Contd. of page 5
 14.6 Special precautions for user 	Not applicable.	
 14.7 Transport in bulk according to Anr Marpol and the IBC Code 	nex II of 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

Signal word volu	
Hazard statement	s Void
Precautionary sta	tements
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.
	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
	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.

· 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.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

• * Data compared to the previous version altered.



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier Trade name: Negative Control Serum · Article number: ITC59400 [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. Store in accordance with local/regional/national/international regulations. P401 P501 Dispose of contents/container in accordance with local/regional/national/international regulations. · 2.3 Other hazards · Results of PBT and vPvB assessment · PBT: Not applicable. · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- **Description:** Serum, human origin, liquid

(Contd. on page 2)



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Negative Control Serum

(Contd. of page 1)

- · 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 Wear protective equipment. Keep unprotected persons away. Not required.
- 6.2 Environmental precautions: No special measures required.
- · 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.
- \cdot 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.

(Contd. on page 3)



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Negative Control Serum

(Contd. of page 2)

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

- · 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
- · Personal protective equipment:
- · General protective and hygienic measures:

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

- · Respiratory protection: Not required.
- · Protection of hands:

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 protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical a	nd chemical properties	
General Information		
· Appearance:	Linuid	
Form:	Liquid	
Colour:	Red	
· Odour:	Odourless	
 Odour threshold: 	Not determined.	
· pH-value at 20 °C:	7.5	
 Change in condition Melting point/freezing point: Initial boiling point and boiling ra 	Undetermined. nge: 100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not applicable.	
· Ignition temperature:	Not determined.	
		(Contd. on page 4)



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Negative Control Serum

		(Contd. of page
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
· Density at 20 °C:	1 g/cm ³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Fully miscible.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
Water:	97.5 %	
 9.2 Other information 	No further relevant information available.	

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 toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · 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.
- 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.

(Contd. on page 5)



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Negative Control Serum

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

(Contd. of page 4)

- · 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.

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.
- · Additional ecological information:
- · General notes: Not hazardous for water.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

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.

14.1 UN-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	



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

3		
rade name: Negative Control Serum		
		(Contd. of page
 · 14.5 Environmental hazards: · Marine pollutant: 	No	
· 14.6 Special precautions for user	Not applicable.	
 14.7 Transport in bulk according to A Marpol and the IBC Code 	nnex II of 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.
- 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.

• 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.

Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

• * Data compared to the previous version altered.



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier · Trade name: Positive Control Serum · Article number: ITC59400 [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 · 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: Not applicable. · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- **Description:** Serum, human origin, liquid

(Contd. on page 2)



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

Trade name: Positive Control Serum

(Contd. of page 1)

- · 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 Wear protective equipment. Keep unprotected persons away. Not required.
- 6.2 Environmental precautions: No special measures required.
- · 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.
- \cdot 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.

(Contd. on page 3)



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Trade name: Positive Control Serum

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• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

- · 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
- · Personal protective equipment:
- · General protective and hygienic measures:

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

- · Respiratory protection: Not required.
- · Protection of hands:

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 protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical an	d chemical properties	
 General Information 		
· Appearance:		
Form:	Liquid	
Colour:	Red	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value at 20 °C:	7.5	
· Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling ran	ge: 100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not applicable.	
· Ignition temperature:	Not determined.	
		(Contd. on page 4)



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		(Contd. of page
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
· Density at 20 °C:	1 g/cm ³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Fully miscible.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
Water:	97.6 %	
· 9.2 Other information	No further relevant information available.	

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 toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · 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.
- 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.

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Trade name: Positive Control Serum

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

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.
- Additional ecological information:
- · General notes: Not hazardous for water.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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.

14.1 UN-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	

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Trade name: Positive Control Serum		
		(Contd. of page 5)
 · 14.5 Environmental hazards: · Marine pollutant: 	No	
· 14.6 Special precautions for user	Not applicable.	
 14.7 Transport in bulk according to Marpol and the IBC Code 	Annex II of 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.
- 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.
- · 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.

Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

• * Data compared to the previous version altered.



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Revision: 21.04.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier Trade name: Washing Buffer (Concentrate 20x) · Article number: ITC59400 [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, 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. · Additional information: EUH208 Contains 2-Methyl-2H-isothiazol-3-on. May produce an allergic reaction. · 2.3 Other hazards · Results of PBT and vPvB assessment · PBT: Not applicable. · vPvB: Not applicable.

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Trade name: Washing Buffer (Concentrate 20x)

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

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

· Dangerous components:

U U			
CAS: 77-86-1 EINECS: 201-064-	TRIS 4	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	≤2.5%

• 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
- · 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.
- \cdot 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 equipment. Keep unprotected persons away. 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 precautions are necessary if used correctly.

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

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Trade name: Washing Buffer (Concentrate 20x)

(Contd. of page 2)

- · 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) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 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
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Respiratory protection: Not required.
- · Protection of hands:

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 protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information

 Change in condition Melting point/freezing point: 	Undetermined.
· pH-value at 20 °C:	6.9
 Odour: Odour threshold: 	Odourless Not determined.
 Appearance: Form: Colour: 	Liquid Colourless

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Trade name: Washing Buffer (Concentrate 20x)

		(Contd. of page 3)
Initial boiling point and boiling range	e: 100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not applicable.	
· Ignition temperature:	Not determined.	
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
 Density at 20 °C: Relative density Vapour density Evaporation rate 	1 g/cm ³ Not determined. Not determined. Not determined.	
 Solubility in / Miscibility with water: 	Fully miscible.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.	
 Solvent content: Organic solvents: Water: 9.2 Other information 	0.0 % 79.9 % No further relevant information available.	

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 toxicological effects

· 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

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Trade name: Washing Buffer (Concentrate 20x)

		(Contd. of page 4)
Dermal	LD50	157,895 mg/kg
Inhalative	LC50/4 h	26.3 mg/l
CAS: 764	7-14-5 sod	lium chloride
Oral	LD50	3,000 mg/kg (rat)
CAS: 77-8	6-1 TRIS	
Oral	LD50	5,900 mg/kg (rat)
 Serious e Respirato CMR effec Germ cell Carcinogo Reproduct STOT-sin STOT-rep 	osion/irrita ye damag ory or skin cts (carcir mutageni enicity Bas ctive toxic gle expos peated exp	ation Based on available data, the classification criteria are not met. e/irritation Based on available data, the classification criteria are not met. sensitisation Based on available data, the classification criteria are not met. nogenity, mutagenicity and toxicity for reproduction) icity Based on available data, the classification criteria are not met. sed on available data, the classification criteria are not met. ity Based on available data, the classification criteria are not met. ity Based on available data, the classification criteria are not met. ity Based on available data, the classification criteria are not met. ity Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.

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.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

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: Washing Buffer (Concentrate 20x)

SECTION 14: Transport information 14.1 UN-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 Transport in bulk according to Annex II of Marpol and the IBC Code 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.
- 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.

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

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Trade name: Washing Buffer (Concentrate 20x)

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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 H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. · Abbreviations and acronyms: ADR: Accord européen sur le transport 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 Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2 STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 • * Data compared to the previous version altered. GB



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier · Trade name: Dilution Buffer · Article number: ITC59400 [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: Not applicable. · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

• Description: Mixture of substances in aqueous solution.

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Trade name: Dilution Buffer

(Contd. of page 1)

- · 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 Wear protective equipment. Keep unprotected persons away. 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.
- \cdot 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.

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• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

- · 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
- · Personal protective equipment:
- · General protective and hygienic measures:

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

- · Respiratory protection: Not required.
- · Protection of hands:

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 protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical a	nd chemical properties	
 General Information 		
· Appearance:		
Form:	Liquid	
Colour:	Red	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value at 20 °C:	7.3	
· Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling rai	n ge: 100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not applicable.	
· Ignition temperature:	Not determined.	
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according to 1907/2006/EC, Article 31				
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Decomposition temperature:	Not determined.			
· Auto-ignition temperature:	Product is not selfigniting.			
· Explosive properties:	Product does not present an explosit	on hazard.		
· Explosion limits: Lower: Upper:	Not determined. Not determined.			
· Vapour pressure at 20 °C:	23 hPa			
 Density at 20 °C: Relative density Vapour density Evaporation rate 	1 g/cm ³ Not determined. Not determined. Not determined.			
 Solubility in / Miscibility with water: 	Fully miscible.			
Partition coefficient: n-octanol/water:	Not determined.			
 Viscosity: Dynamic: Kinematic: 	Not determined. Not determined.			
 Solvent content: Organic solvents: Water: 9.2 Other information 	0.0 % 97.1 % No further relevant information availa	able.		

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 toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

CAS: 7647-14-5 sodium chloride

Oral LD50 3,000 mg/kg (rat)

- · Primary irritant effect:
- 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.

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· 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.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

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.
- · Additional ecological information:
- · 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.

- · 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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
 · ADR, ADN, IMDG, IATA

not regulated

· 14.2 UN proper shipping name

· ADR, ADN, IMDG, IATA

not regulated

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		(Contd. of page §
· 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 Transport in bulk according to A	nnex II of	
Marpol and the IBC Code	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.
- 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.

· 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.

Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

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Trade name: Dilution Buffer

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

·* Data compared to the previous version altered.



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

Revision: 21.04.2020

1.1 Product identifier · Trade name: Conjugate Solution · Article number: ITC59400 [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 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. Additional information: EUH208 Contains 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). May produce an allergic reaction. · 2.3 Other hazards Results of PBT and vPvB assessment · PBT: Not applicable. · vPvB: Not applicable.

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Trade name: Conjugate Solution

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SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: 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
- · 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.
- \cdot 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 equipment. Keep unprotected persons away. Not required.
- · 6.2 Environmental precautions: No special measures required.
- · 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 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.

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Trade name: Conjugate Solution

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• Further information about storage conditions: No further requirements.

Keep container tightly sealed.

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 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
- · Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Respiratory protection: Not required.
- · Protection of hands:

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 protection: Goggles recommended during refilling

SECTION 9: Physical and che	emical properties	
• 9.1 Information on basic physical a · General Information · Appearance:	ind chemical properties	
· Appearance: Form:	Liquid	
Colour:	Yellowish	
· Odour:	Odourless	
 Odour threshold: 	Not determined.	
· pH-value at 20 °C:	7.2	
 Change in condition Melting point/freezing point: Initial boiling point and boiling ratio 	Undetermined. I nge: 100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not applicable.	
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rade name: Conjugate Solution		
		(Contd. of page 3
 Ignition temperature: 	Not determined.	
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explo	osion hazard.
· Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
 Density at 20 °C: Relative density Vapour density Evaporation rate 	1 g/cm ³ Not determined. Not determined. Not determined.	
 Solubility in / Miscibility with water: 	Fully miscible.	
· Partition coefficient: n-octanol/water:	Not determined.	
 Viscosity: Dynamic: Kinematic: 	Not determined. Not determined.	
 Solvent content: Organic solvents: Water: 	0.0 % 75.3 %	
 9.2 Other information 	No further relevant information ava	ailable.

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 toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- 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.
- · 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.

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Trade name: Conjugate Solution

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
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- · 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.

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.
- · Additional ecological information:
- · General notes: Not hazardous for water.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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.

14.1 UN-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	

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Trade name: Conjugate Solution		
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· 14.5 Environmental hazards:		
· Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to	Annex II of	
Marpol and the IBC Code	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.
- 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.

· 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.

Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

 \cdot * Data compared to the previous version altered.



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Revision: 21.04.2020

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

· 1.1 Product identifier

Trade name: <u>TMB Solution</u>

- · Article number: ITC59400 [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
 Repr. 1B H360D May damage the unborn child.
 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 Danger

- · Hazard-determining components of labelling:
- N-methyl-2-pyrrolidone
- · Hazard statements
- H360D May damage the unborn child.
- · 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: TMB Solution

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· 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances in aqueous solution.

· Dangerous components:		
CAS: 872-50-4	N-methyl-2-pyrrolidone	2.5-5%
EINECS: 212-828-1	Repr. 1B, H360D; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
0)///0		

· SVHC

CAS: 872-50-4 N-methyl-2-pyrrolidone

· 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: 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.
- \cdot 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- \cdot 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
 Ensure adequate ventilation
 Do not breathe gas/fume/vapours/spray.
 Wear protective clothing.
 Avoid contact with skin, eyes and 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).

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Trade name: TMB Solution

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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

Use local exhaust ventilation for open handling. Do not breathe gas/fume/vapours/spray.

· 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) No further relevant information available.

SECTION 8: Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

CAS: 872-50-4 N-methyl-2-pyrrolidone

WEL Short-term value: 80 mg/m³, 20 ppm Long-term value: 40 mg/m³, 10 ppm Sk

DNELs

CAS: 872-50-4

Name: N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone

DNEL values:

DNEL employees, long-term; Route of exposure: inhalation; Effect: systemic; Value: 14.4 mg / m³ DNEL employees, long-term; Route of exposure: dermal; Effect: systemic; Value: 4.8 mg / kg bw / d • Additional information: The lists valid during the making were used as basis.

- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- Establish and observe skin protection plan.

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of work.

· Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:

Protective gloves for handling chemicals must meet the requirements of the European standard EN 374. The following glove materials are not suitable due to degradation, strong swelling or low breakthrough time: Natural rubber/ latex, Polychloropren, Nitril rubber, fluororubber, Polyvinyl chloride

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

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(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

Butyl rubber, BR

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 protection: Frame glasses with side shield

SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical and o	chemical properties
General Information Appearance:	
· Appearance: Form:	Liquid
Colour:	Colourless
· Odour:	Odourless
· Odour threshold:	Not determined.
· pH-value at 20 °C:	3.7
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range	: 100 °C
· Flash point:	Not applicable.
· Flammability (solid, gas):	Not applicable.
Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density:	Not determined.
· Relative density	Not determined.
 Vapour density 	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
	(Contd. on page 5

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		(Contd. of pa
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	0.0 %	
Water:	99.9 %	
9.2 Other information	No further relevant information available.	

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

· 11.1 Information on toxicological effects

· Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

CAS: 872-50-4 N-methyl-2-pyrrolidone

Oral LD50 3,914 mg/kg (rat)

Dermal LD50 8,000 mg/kg (rabbit)

- · Primary irritant effect:
- · 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- 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
- May damage the unborn child.
- 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.

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.

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• **12.4 Mobility in soil** No further relevant information available.

· Additional ecological information:

· 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.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

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.

14.1 UN-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 Transport in bulk according to Ann Marpol and the IBC Code	ex II of Not applicable.	
Transport/Additional information:		
ADR Limited quantities (LQ)	not regulated	
· UN "Model Regulation":	not regulated	

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Trade name: TMB Solution

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





· Signal word Danger

- · Hazard-determining components of labelling:
- N-methyl-2-pyrrolidone

· Hazard statements

H360D May damage the unborn child.

· 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.
- 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, 30, 71, 72
- · National regulations:
- · Other regulations, limitations and prohibitive regulations

· Substances of very high concern (SVHC) according to REACH, Article 57

CAS: 872-50-4 N-methyl-2-pyrrolidone

• 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

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H360D May damage the unborn child.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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Trade name: TMB Solution

(Contd. of page 7) 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) DNEL: Derived No-Effect Level (REACH) LC50: Lethal concentration, 50 percent DD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Repr. 1B: Reproductive toxicity – Category 1B STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 • * Data compared to the previous version altered.



Printing date 21.04.2020

1.1 Product identifier

Version number 4

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

Revision: 21.04.2020

Trade name: Stop Solution Article number: ITC59400 [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 Corr. 1A H314 Causes severe skin burns and eye damage. Eye Dam. 1 H318 Causes serious eye damage. 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 GHS05 · Signal word Danger · Hazard-determining components of labelling: sulphuric acid · Hazard statements H314 Causes severe skin burns and eye damage. · 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. (Contd. on page 2) GB нитап **Diagnostics Worldwide**

≥2.5-<5%

📀 Skin Corr. 1A, H314

Safety data sheet according to 1907/2006/EC, Article 31

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Trade name: Stop Solution

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

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

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

· Dangerous components:

CAS: 7664-93-9 sulphuric acid EINECS: 231-639-5

• 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
- 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 Wear protective equipment. Keep unprotected persons away. Not required.
- · 6.2 Environmental precautions: Dilute with plenty of 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.

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Trade name: Stop Solution

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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.

 \cdot 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) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

CAS: 7664-93-9 sulphuric acid

WEL Long-term value: 0.05* mg/m³

*mist: defined as thoracic fraction

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- \cdot 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.

· Protection of hands:



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.

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Trade name: Stop Solution

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· 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.

\cdot Eye protection:

Tightly sealed goggles

SECTION 9: Physical and chemi	ical properties	
· 9.1 Information on basic physical and	chemical properties	
· General Information		
· Appearance:		
Form:	Liquid	
Colour:	Colourless	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value at 20 °C:	< 1	
· Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling range	e: 100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not applicable.	
· Ignition temperature:	Not determined.	
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
· Density at 20 °C:	1.0233 g/cm ³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Fully miscible.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
		(Contd. on page



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Trade name: Stop Solution

Water: • 9.2 Other information

No further relevant information available.

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.

97.2 %

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

CAS: 7664-93-9 sulphuric acid

Inhalative inhalative 510 mg/m3 (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation
- Causes severe skin burns and eye damage.
- · Serious eye damage/irritation
- Causes serious eye damage.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

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.
- · Additional ecological information:
- · 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.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.

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Trade name: Stop Solution

• **vPvB:** Not applicable.

· 12.6 Other adverse effects No further relevant information available.

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 information

· 14.1 UN-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 Transport in bulk according to Annex Marpol and the IBC Code 	II of 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.

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ade name: Stop	Solution
	(Contd. of page
· Hazard pictog	rams
\wedge	
L Z	
GHS05	
011000	
· Signal word D	anger
•	
	nining components of labelling:
sulphuric acid • Hazard statem	
	evere skin burns and eye damage.
Precautionary 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.
. =	353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin w
1 00011 00111 0	water [or shower].
P305+P351+P3	338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses
	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/internatio
	regulations.

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

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

H314 Causes severe skin burns and eye damage.

Abbreviations and acronyms:

ADR: Accord européen sur le transport 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
- Skin Corr. 1A: Skin corrosion/irritation Category 1A
- Eye Dam. 1: Serious eye damage/eye irritation Category 1
- * Data compared to the previous version altered.



Printing date 21.04.2020

Version number 4

Revision: 21.04.2020

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

· 1.1 Product identifier

· Trade name: Mikrotiter strips

- · Article number: ITC59400 [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, 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.
- 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: Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

- · Description: solid polystyrene strips, breakable, coated with native antigen(s)
- · 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.

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Trade name: Mikrotiter strips

(Contd. of page 1)

• 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.

- \cdot 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 equipment. Keep unprotected persons away. 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.
- \cdot Further information about storage conditions:

No further requirements. Keep container tightly sealed.

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 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.

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

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

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

- · Respiratory protection: Not required.
- · Protection of hands:

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 protection: Not required.

SECTION 9: Physical and chemic	cal properties	
 9.1 Information on basic physical and c General Information Appearance: 	hemical properties	
Form:	Solid	
Colour:	Colourless	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
 Change in condition Melting point/freezing point: Initial boiling point and boiling range: 	Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not determined.	
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure:	Not applicable.	
· Density:	Not determined.	
· Relative density	Not determined.	
· Vapour density	Not applicable.	
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· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
water:	Insoluble.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Solids content:	100.0 %	
· 9.2 Other information	No further relevant information available.	

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 toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

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.
- · Additional ecological information:
- · General notes: Not hazardous for water.
- · 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.

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• **vPvB:** Not applicable.

· 12.6 Other adverse effects No further relevant information available.

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.

SECTION 14: Transport information

· 14.1 UN-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:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 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.

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(Contd. of page 5) 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.

· 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.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

• * Data compared to the previous version altered.

