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

Printing date: 24.06.2021 Version number: 1.0 Revision: 24.06.2021

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

1.1 Product identifier

Trade name: Binding Optimizer
UFI: W2PX-6WF5-A80C-1UQM

1.2 Relevant identified uses of the substance or mixture and uses advised against:
No further relevant information available.
Application of the substance / the preparation: Laboratory chemicals

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
IST Innuscreen GmbH
Robert-Rössle-Strasse 10
13125 Berlin / Germany
Phone: +49 30 9489 3380
Fax: +49 30 9489 3381
E-Mail: sds.innu@ist-ag.com
Internet: www.ist-ag.com

Further information obtainable from: IST Innuscreen GmbH

1.4 Emergency telephone number:
Poison Information Center / Vergiftungs-Informations-Zentrale
Mathildenstraße 1
79106 Freiburg / Germany
Phone: +49 761 19 240
Fax: +49 761 270 44 570
E-Mail: giftinfo@uniklinik-freiburg.de
Internet: www.giftberatung.de

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:
Classification according to Regulation (EC) No 1272/2008:

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements:
Labelling according to Regulation (EC) No 1272/2008:
The product is classified and labelled according to the CLP regulation.
Hazard pictograms:

GHS07

Signal word: Warning
Hazard statements:
H315 Causes skin irritation.
H319 Causes serious eye irritation.
Precautionary statements:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

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P103	Read carefully and follow all instructions.
P280	Wear protective gloves / eye protection / face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P337+P313	If eye irritation persists: Get medical advice/attention.
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 Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 64-19-7 acetic acid >10-<25%
EINECS: 200-580-7 Flam. Liq. 3, H226; Skin Corr. 1A, H314
Specific concentration limits: Skin Corr. 1A; H314: C ≥ 90 %
Skin Corr. 1B; H314: 25 % ≤ C < 90 %
Skin Irrit. 2; H315: 10 % ≤ C < 25 %
Eye Irrit. 2; H319: 10 % ≤ C < 25 %

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:
Take affected persons out into the fresh air.
Do not leave affected persons unattended.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact:
Rinse opened eye for several minutes under running water.
Call a doctor immediately.
After swallowing: Call a doctor immediately.
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:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet
5.2 Special hazards arising from the substance or mixture:
Formation of toxic gases is possible during heating or in case of fire.

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Trade name: Binding Optimizer

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5.3 Advice for firefighters:
Protective equipment:
Mouth respiratory protective device.
Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear protective clothing.
6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.
6.3 Methods and material for containment and cleaning up:
Ensure adequate ventilation.
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:
Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Store in cool, dry place in tightly closed receptacles.
Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

7.2 Conditions for safe storage, including any incompatibilities:
Storage:
Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
Information about storage in one common storage facility:
Do not store together with alkalis (caustic solutions).
Store away from foodstuffs.
Further information about storage conditions:
Keep container tightly sealed.
Store receptacle in a well ventilated area.
7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:
Ingredients with limit values that require monitoring at the workplace:

64-19-7 acetic acid

OEL Short-term value: 50 mg/m³, 20 ppm
Long-term value: 25 mg/m³, 10 ppm
IOELV

8.2 Exposure controls:
Appropriate engineering controls No further data; see item 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

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Trade name: Binding Optimizer

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Respiratory protection:
Use suitable respiratory protective device in case of insufficient ventilation.
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.
Filter E
Hand protection Protective gloves
Material of gloves:
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.5 mm
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.
Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye/face protection Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information:	
Colour:	Clear
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	100 °C
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH at 20 °C	5.2
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Soluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.

9.2 Other information:

Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	485 °C
Explosive properties:	Product does not present an explosion hazard.

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Change in condition:	
Evaporation rate:	Not determined.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.
10.2 Chemical stability:
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions: Reacts with alkali (lyes).
10.4 Conditions to avoid: No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:

64-19-7 acetic acid
Oral LD50 3,310 mg/kg (rat)
Dermal LD50 1,060 mg/kg (rabbit)
Skin corrosion/irritation
Causes skin irritation.
Serious eye damage/irritation
Causes serious eye irritation.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.

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Trade name: Binding Optimizer

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Aspiration hazard Based on available data, the classification criteria are not met.
11.2 Information on other hazards
Endocrine disrupting properties
None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity:
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: No further relevant information available.
12.4 Mobility in soil: No further relevant information available.
12.5 Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
12.7 Other adverse effects:
Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:
European waste catalogue:
Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number
ADR, IMDG, IATA UN2790
14.2 UN proper shipping name:
ADR 2790 ACETIC ACID SOLUTION
IMDG, IATA ACETIC ACID SOLUTION
14.3 Transport hazard class(es):

ADR, IMDG, IATA

Class: 8 Corrosive substances.
Label: 8
14.4 Packing group:
ADR, IMDG, IATA III
14.5 Environmental hazards:
Marine pollutant: No

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Trade name: Binding Optimizer

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14.6 Special precautions for user:	Warning: Corrosive substances.
Hazard identification number (Kemler code):	80
EMS Number:	F-A,S-B
Segregation groups:	Acids
Stowage Category	A
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.

Transport/Additional information:

ADR	
Limited quantities (LQ):	5L
Transport category:	3
Tunnel restriction code:	E
UN "Model Regulation":	UN 2790 ACETIC ACID SOLUTION, 8, III

SECTION 15: Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.
REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.
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:
H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
Training hints:
Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

Department issuing SDS:
ADEEGO GmbH
Wildsteig 4A
D-42113 Wuppertal
Tel. +49 (0) 202 2575700
Fax. +49 (0) 202 2575701
Email: mail@adeego.de
www.adeego.de
Contact: Dr. Axel Deeg

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Trade name: Binding Optimizer

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Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids – Category 3
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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

Printing date: 13.09.2021 Version number: 1.0 Revision: 13.09.2021

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

1.1 Product identifier

Trade name: Ery Lysis Solution A (conc.)

1.2 Relevant identified uses of the substance or mixture and uses advised against:
No further relevant information available.
Application of the substance / the preparation: Laboratory chemicals

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
IST Innuscreen GmbH
Robert-Rössle-Strasse 10
13125 Berlin / Germany
Phone: +49 30 9489 3380
Fax: +49 30 9489 3381
E-Mail: sds.innu@ist-ag.com
Internet: www.ist-ag.com

Further information obtainable from: IST Innuscreen GmbH
1.4 Emergency telephone number:
Poison Information Center / Vergiftungs-Informations-Zentrale
Mathildenstraße 1
79106 Freiburg / Germany
Phone: +49 761 19 240
Fax: +49 761 270 44 570
E-Mail: giftinfo@uniklinik-freiburg.de
Internet: www.giftberatung.de

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
2.3 Other hazards:
Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

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:
Take affected persons out into the fresh air.

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Trade name: Ery Lysis Solution A (conc.)

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Do not leave affected persons unattended.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact:
Rinse opened eye for several minutes under running water.
Call a doctor immediately.
After swallowing: Call a doctor immediately.
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:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
5.2 Special hazards arising from the substance or mixture:
Formation of toxic gases is possible during heating or in case of fire.
5.3 Advice for firefighters:
Protective equipment:
Mouth respiratory protective device.
Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation.
Keep away from ignition sources.
Wear protective clothing.
6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.
6.3 Methods and material for containment and cleaning up:
Ensure adequate ventilation.
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:
Ensure good ventilation/exhaustion at the workplace.
Store in cool, dry place in tightly closed receptacles.
Information about fire - and explosion protection: The product is not flammable.

7.2 Conditions for safe storage, including any incompatibilities:
Storage:
Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions:
Keep container tightly sealed.
Store receptacle in a well ventilated area.

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Trade name: Ery Lysis Solution A (conc.)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls:
Appropriate engineering controls No further data; see item 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Immediately remove all soiled and contaminated clothing.
Do not inhale gases / fumes / aerosols.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Respiratory protection: Not necessary if room is well-ventilated.
Hand protection Protective gloves
Material of gloves:
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.35 mm
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.
Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye/face protection Tightly sealed goggles

SECTION 9: Physical and chemical properties

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

Physical state	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	100 °C
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Soluble.

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Safety data sheet
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Trade name: Ery Lysis Solution A (conc.)

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Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.

9.2 Other information:

Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	425 °C
Explosive properties:	Product does not present an explosion hazard.
Change in condition:	
Evaporation rate:	Not determined.

Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.
10.2 Chemical stability:
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions: No dangerous reactions known.
10.4 Conditions to avoid: No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
Skin corrosion/irritation Based on available data, the classification criteria are not met.

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Safety data sheet
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Trade name: Ery Lysis Solution A (conc.)

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Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
11.2 Information on other hazards
Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity:
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: No further relevant information available.
12.4 Mobility in soil: No further relevant information available.
12.5 Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
12.7 Other adverse effects:
Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:
European waste catalogue:
Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number
ADR, ADN, IMDG, IATA Void
14.2 UN proper shipping name:
ADR, ADN, IMDG, IATA Void
14.3 Transport hazard class(es):

ADR, ADN, IMDG, IATA
Class: Void
14.4 Packing group:
ADR, IMDG, IATA Void
14.5 Environmental hazards:
Marine pollutant: No

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Trade name: Ery Lysis Solution A (conc.)

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14.6 Special precautions for user: Not applicable.
14.7 Maritime transport in bulk according to IMO instruments Not applicable.
UN "Model Regulation": Void

SECTION 15: Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.
REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.
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.

Department issuing SDS:
ADEEGO GmbH
Wildsteig 4A
D-42113 Wuppertal
Tel. +49 (0) 202 2575700
Fax. +49 (0) 202 2575701
Email: mail@adeego.de
www.adeego.de

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Contact: Dr. Axel Deeg
Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

Printing date: 28.06.2021 Version number: 1.0 Revision: 28.06.2021

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

1.1 Product identifier

Trade name: Lysis Solution CBV

1.2 Relevant identified uses of the substance or mixture and uses advised against:
No further relevant information available.
Application of the substance / the preparation: Laboratory chemicals

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
IST Innuscreen GmbH
Robert-Rössle-Strasse 10
13125 Berlin / Germany
Phone: +49 30 9489 3380
Fax: +49 30 9489 3381
E-Mail: sds.innu@ist-ag.com
Internet: www.ist-ag.com

Further information obtainable from: IST Innuscreen GmbH
1.4 Emergency telephone number:
Poison Information Center / Vergiftungs-Informations-Zentrale
Mathildenstraße 1
79106 Freiburg / Germany
Phone: +49 761 19 240
Fax: +49 761 270 44 570
E-Mail: giftinfo@uniklinik-freiburg.de
Internet: www.giftberatung.de

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
2.3 Other hazards:
Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 151-21-3 sodium dodecyl sulphate >2.5-<10%
EINECS: 205-788-1 Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; Aquatic Chronic 3, H412
Specific concentration limits: Eye Dam. 1; H318: C ≥ 20 %
Eye Irrit. 2; H319: 10 % ≤ C < 20 %

Additional information: For the wording of the listed hazard phrases refer to section 16.

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

Printing date: 28.06.2021 Version number: 1.0 Revision: 28.06.2021

Trade name: Lysis Solution CBV

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SECTION 4: First aid measures

4.1 Description of first aid measures:
General information:
Take affected persons out into the fresh air.
Do not leave affected persons unattended.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact:
Rinse opened eye for several minutes under running water.
Call a doctor immediately.
After swallowing: Call a doctor immediately.
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:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet
5.2 Special hazards arising from the substance or mixture: No further relevant information available.
5.3 Advice for firefighters:
Protective equipment:
Mouth respiratory protective device.
Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear protective clothing.
6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
6.4 Reference to other sections:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling: Store in cool, dry place in tightly closed receptacles.
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: Store only in the original receptacle.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions: Keep container tightly sealed.
7.3 Specific end use(s): No further relevant information available.

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

Printing date: 28.06.2021 Version number: 1.0 Revision: 28.06.2021

Trade name: Lysis Solution CBV

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters:
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls:
Appropriate engineering controls No further data; see item 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
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: Not necessary if room is well-ventilated.
Hand protection Protective gloves
Material of gloves:
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.35 mm
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.
Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye/face protection Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information:	
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	0 °C
Boiling point or initial boiling point and boiling range	100 °C
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH at 20 °C	7
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	23 hPa

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

Printing date: 28.06.2021 Version number: 1.0 Revision: 28.06.2021

Trade name: Lysis Solution CBV

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Density and/or relative density	
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.
9.2 Other information:	
Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Explosive properties:	Product does not present an explosion hazard.
Change in condition:	
Evaporation rate:	Not determined.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.
10.2 Chemical stability:
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions: No dangerous reactions known.
10.4 Conditions to avoid: No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
Germ cell mutagenicity Based on available data, the classification criteria are not met.

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Safety data sheet
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Trade name: Lysis Solution CBV

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Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
11.2 Information on other hazards
Endocrine disrupting properties
None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity:
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: No further relevant information available.
12.4 Mobility in soil: No further relevant information available.
12.5 Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
12.7 Other adverse effects:
Additional ecological information:
General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:
European waste catalogue:
Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number	
ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name:	
ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es):	
ADR, ADN, IMDG, IATA	
Class:	Void
14.4 Packing group:	
ADR, IMDG, IATA	Void
14.5 Environmental hazards:	
Marine pollutant:	No
14.6 Special precautions for user:	Not applicable.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.

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Safety data sheet
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Trade name: Lysis Solution CBV

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UN "Model Regulation": Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
No further relevant information available.

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.
REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.
15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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

Relevant phrases:
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.
Training hints:
Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

Department issuing SDS:
ADEEGO GmbH
Wildsteig 4A
D-42113 Wuppertal
Tel. +49 (0) 202 2575700
Fax. +49 (0) 202 2575701
Email: mail@adeego.de
www.adeego.de
Contact: Dr. Axel Deeg
Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

Printing date: 02.07.2021 Version number: 1.0 Revision: 02.07.2021

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

1.1 Product identifier

Trade name: Proteinase K
CAS Number:
39450-01-6
EC number:
254-457-8
UFI: KGS0-VXDN-Q80F-2YRS

1.2 Relevant identified uses of the substance or mixture and uses advised against:
No further relevant information available.
Application of the substance / the preparation: Laboratory chemicals
Uses advised against: No further information available.

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
IST Innuscreen GmbH
Robert-Rössle-Strasse 10
13125 Berlin / Germany
Phone: +49 30 9489 3380
Fax: +49 30 9489 3381
E-Mail: sds.innu@ist-ag.com
Internet: www.ist-ag.com

Further information obtainable from: IST Innuscreen GmbH
1.4 Emergency telephone number:
Poison Information Center / Vergiftungs-Informations-Zentrale
Mathildenstraße 1
79106 Freiburg / Germany
Phone: +49 761 19 240
Fax: +49 761 270 44 570
E-Mail: giftinfo@uniklinik-freiburg.de
Internet: www.giftberatung.de

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:
Classification according to Regulation (EC) No 1272/2008:

GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements:
Labelling according to Regulation (EC) No 1272/2008:
The substance is classified and labelled according to the CLP regulation.

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

Printing date: 02.07.2021 Version number: 1.0 Revision: 02.07.2021

Trade name: Proteinase K

(Contd. of page 1)

Hazard pictograms:

GHS07 GHS08

Signal word: Danger

Hazard-determining components of labelling:
proteinase
Hazard statements:
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
Precautionary statements:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves / eye protection / face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
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

3.1 Substances
CAS No. Description
39450-01-6 proteinase
Identification number(s):
EC number: 254-457-8
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:
Take affected persons out into the fresh air.
Do not leave affected persons unattended.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact:
Rinse opened eye for several minutes under running water.
Call a doctor immediately.

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

Printing date: 02.07.2021 Version number: 1.0 Revision: 02.07.2021

Trade name: Proteinase K

(Contd. of page 2)

After swallowing: Call a doctor immediately.
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:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet
5.2 Special hazards arising from the substance or mixture: No further relevant information available.
5.3 Advice for firefighters:
Protective equipment:
Mouth respiratory protective device.
Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear protective clothing.
6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.
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: Store in cool, dry place in tightly closed receptacles.
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: Store only in the original receptacle.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions: None.
7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:
Ingredients with limit values that require monitoring at the workplace: Not required.

8.2 Exposure controls:
Appropriate engineering controls No further data; see item 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
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: Not necessary if room is well-ventilated.

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

Printing date: 02.07.2021 Version number: 1.0 Revision: 02.07.2021

Trade name: Proteinase K

(Contd. of page 3)

Hand protection Protective gloves
Material of gloves:
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.35 mm
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.
Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye/face protection Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information:	
Colour:	White
Odour:	Nearly odourless
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Soluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density at 20 °C:	1.1 g/cm³
Relative density:	Not determined.
Vapour density:	Not determined.
Particle characteristics	See item 3.

9.2 Other information:

Appearance:	
Form:	Solid
Important information on protection of health and environment, and on safety.	
Explosive properties:	Product does not present an explosion hazard.
Change in condition:	
Evaporation rate:	Not determined.
Information with regard to physical hazard classes	
Explosives	Void

(Contd. on page 5)

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

Printing date: 02.07.2021 Version number: 1.0 Revision: 02.07.2021

Trade name: Proteinase K

(Contd. of page 4)

Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.
10.2 Chemical stability:
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions: No dangerous reactions known.
10.4 Conditions to avoid: No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
Skin corrosion/irritation
Causes skin irritation.
Serious eye damage/irritation
Causes serious eye irritation.
Respiratory or skin sensitisation
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure
May cause respiratory irritation.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
11.2 Information on other hazards
Endocrine disrupting properties
Substance is not listed.

(Contd. on page 6)

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

Printing date: 02.07.2021 Version number: 1.0 Revision: 02.07.2021

Trade name: Proteinase K

(Contd. of page 5)

SECTION 12: Ecological information

12.1 Toxicity:
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: No further relevant information available.
12.4 Mobility in soil: No further relevant information available.
12.5 Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
12.7 Other adverse effects:
Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:
European waste catalogue:
Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number	
ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name:	
ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es):	
ADR, ADN, IMDG, IATA	
Class:	Void
14.4 Packing group:	
ADR, IMDG, IATA	Void
14.5 Environmental hazards:	
Marine pollutant:	No
14.6 Special precautions for user:	Not applicable.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
UN "Model Regulation":	Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
No further relevant information available.

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

Printing date: 02.07.2021 Version number: 1.0 Revision: 02.07.2021

Trade name: Proteinase K

(Contd. of page 6)

Directive 2012/18/EU
Named dangerous substances - ANNEX I Substance is not listed.
DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

Substance is not listed.
REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS

Substance is not 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.

Training hints:
Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

Department issuing SDS:
ADEEGO GmbH
Wildsteig 4A
D-42113 Wuppertal
Tel. +49 (0) 202 2575700
Fax. +49 (0) 202 2575701
Email: mail@adeego.de
www.adeego.de
Contact: Dr. Axel Deeg

Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
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
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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

Printing date: 06.07.2021 Version number: 1.0 Revision: 06.07.2021

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

1.1 Product identifier

Trade name: Washing Solution LS (conc.)

1.2 Relevant identified uses of the substance or mixture and uses advised against:
No further relevant information available.
Application of the substance / the preparation: Laboratory chemicals

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
IST Innuscreen GmbH
Robert-Rössle-Strasse 10
13125 Berlin / Germany
Phone: +49 30 9489 3380
Fax: +49 30 9489 3381
E-Mail: sds.innu@ist-ag.com
Internet: www.ist-ag.com

Further information obtainable from: IST Innuscreen GmbH
1.4 Emergency telephone number:
Poison Information Center / Vergiftungs-Informations-Zentrale
Mathildenstraße 1
79106 Freiburg / Germany
Phone: +49 761 19 240
Fax: +49 761 270 44 570
E-Mail: giftinfo@uniklinik-freiburg.de
Internet: www.giftberatung.de

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
2.3 Other hazards:
Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

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:
Take affected persons out into the fresh air.

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Do not leave affected persons unattended.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact:
Rinse opened eye for several minutes under running water.
Call a doctor immediately.
After swallowing: Call a doctor immediately.
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:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
5.2 Special hazards arising from the substance or mixture: No further relevant information available.
5.3 Advice for firefighters:
Protective equipment:
Mouth respiratory protective device.
Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Wear protective clothing.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Ensure adequate ventilation.
6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.
6.3 Methods and material for containment and cleaning up:
Ensure adequate ventilation.
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:
Ensure good ventilation/exhaustion at the workplace.
Store in cool, dry place in tightly closed receptacles.
Prevent formation of aerosols.
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:
Storage:
Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions: Keep container tightly sealed.
7.3 Specific end use(s): No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters:
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls:
Appropriate engineering controls No further data; see item 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
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: Not necessary if room is well-ventilated.
Hand protection Protective gloves
Material of gloves:
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.5 mm
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.
Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye/face protection Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information:	
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH at 20 °C	7.5
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Soluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.

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Density and/or relative density	
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.
9.2 Other information:	
Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Explosive properties:	Product does not present an explosion hazard.
Change in condition:	
Evaporation rate:	Not determined.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.
10.2 Chemical stability:
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions: Reacts with strong acids and alkali.
10.4 Conditions to avoid: No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
Germ cell mutagenicity Based on available data, the classification criteria are not met.

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Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
11.2 Information on other hazards
Endocrine disrupting properties
None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity:
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: No further relevant information available.
12.4 Mobility in soil: No further relevant information available.
12.5 Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
12.7 Other adverse effects:
Additional ecological information:
General notes: Not hazardous for water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:
European waste catalogue:
Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number
ADR, ADN, IMDG, IATA Void
14.2 UN proper shipping name:
ADR, ADN, IMDG, IATA Void
14.3 Transport hazard class(es):

ADR, ADN, IMDG, IATA
Class: Void
14.4 Packing group:
ADR, IMDG, IATA Void
14.5 Environmental hazards:
Marine pollutant: No
14.6 Special precautions for user: Not applicable.
14.7 Maritime transport in bulk according to IMO instruments Not applicable.
UN "Model Regulation": Void

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
No further relevant information available.

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.
REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.
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.

Training hints:
Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

Department issuing SDS:
ADEEGO GmbH
Wildsteig 4A
D-42113 Wuppertal
Tel. +49 (0) 202 2575700
Fax. +49 (0) 202 2575701
Email: mail@adeego.de
www.adeego.de
Contact: Dr. Axel Deeg
Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative