Product	Cat.-No.
Adenovirus IgA	IB79201
Adenovirus IgG	IB79202
Adenovirus IgM	IB79203
Aspergillus fumigatus IgA	IB79204
Aspergillus fumigatus IgG	IB79205
Aspergillus fumigatus IgM	IB79206
Borrelia burgdorferi IgG	IB79804
Borrelia burgdorferi IgM	IB79805
Bordetella pertussis IgA	IB79207
Bordetella pertussis IgG	IB79208
Bordetella pertussis IgM	IB79209
Brucella abortus IgA	IB79210
Brucella abortus IgG	IB79211
Brucella abortus IgM	IB79212
Candida albicans IgA	IB79213
Candida albicans IgG	IB79214
Candida albicans IgM	IB79215
Diphtheria IgG	IB79219
EBV EA (Early Antigen) IgA	IB79223
EBV EA (Early Antigen) IgG	IB79224
EBV EA (Early Antigen) IgM	IB79225
EBV EBNA-1 IgA	IB79226
EBV EBNA-1 IgG	IB79227
EBV EBNA-1 IgM	IB79228
EBV VCA IgA	IB79229
EBV VCA IgG	IB79230
EBV VCA IgM	IB79231
Echinococcus granulosus IgG	IB79221
TBEV IgA	IB79232
TBEV IgG	IB79233
TBEV IgM	IB79234
Gliadin IgA	IB79293
Gliadin IgG	IB79294
Gliadin IgM	IB79295
Helicobacter pylori IgA	IB79235
Helicobacter pylori IgG	IB79236
Helicobacter pylori IgM	IB79237

Product	Cat.-No.
Herpes Simplex 1 IgA ELISA	IB79241
Herpes Simplex 1 IgG ELISA	IB79242
Herpes Simplex 1 IgM ELISA	IB79243
Herpes Simplex 2 IgA ELISA	IB79247
Herpes Simplex 2 IgG ELISA	IB79248
Herpes Simplex 2 IgM ELISA	IB79249
Herpes Simplex 1&2 IgA ELISA	IB79244
Herpes Simplex 1&2 IgG ELISA	IB79245
Herpes Simplex 1&2 IgM ELISA	IB79246
Influenza A IgA ELISA	IB79250
Influenza A IgG ELISA	IB79251
Influenza A IgM ELISA	IB79252
Influenza B IgA ELISA	IB79253
Influenza B IgG ELISA	IB79254
Influenza B IgM ELISA	IB79255
Measles IgG ELISA	IB79257
Measles IgM ELISA	IB79258
Mumps IgA ELISA	IB79259
Mumps IgG ELISA	IB79260
Mumps IgM ELISA	IB79261
Mycoplasma pneumoniae IgA ELISA	IB79262
Mycoplasma pneumoniae IgG ELISA	IB79263
Mycoplasma pneumoniae IgM ELISA	IB79264
Parainfluenza 1,2&3 IgA ELISA	IB79268
Parainfluenza 1,2&3 IgG ELISA	IB79269
Parainfluenza 1,2&3 IgM ELISA	IB79270
Poliomyelitis virus IgG ELISA	IB79277
Respiratory syncytial virus IgA (RSV) ELISA	IB79279
Respiratory syncytial virus IgG (RSV) ELISA	IB79280
Respiratory syncytial virus IgM (RSV) ELISA	IB79281
Tetanus IgG ELISA	IB79282
Tuberculosis IgG (Mycobacterium t.) ELISA	IB79284
Tuberculosis IgM (Mycobacterium t.) ELISA	IB79285
Varicella zoster IgA ELISA	IB79286
Varicella zoster IgG ELISA	IB79287
Varicella zoster IgM ELISA	IB79288
Yersinia enterocolitica IgA ELISA	IB79289
Yersinia enterocolitica IgG ELISA	IB79290
Yersinia enterocolitica IgM ELISA	IB79291

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1. Product identifier

Trade name: Enzyme immunoassays for the determination of human antibodies against infectious agents.
Article Number: Various (see first page)
Components:
0) Microtiter Plate
1) Substrate Solution
2) Conjugate
3) Washing Solution (10x Concentrate)
4) Sample Diluent
5) Calibrators
6) *Stop Solution*

Concerning safety the microtiter plate (0) is inoffensive and for this reason not part of this document. The mixtures 1 – 5, due to coincident categorization, are combined as a group and treated and dealt with below. The mixture 6 (Stop Solution) is dealt with below in a separate safety data sheet.

1.2. Application of the substance / the preparation

Enzyme immunoassay based on microtiter plate for the detection and determination of human antibodies against infectious agents in serum or plasma.

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier: IMMUNO-BIOLOGICAL LABORATORIES, INC. (IBL-AMERICA)
Address: 8201 Central Ave NE, Suite P
Minneapolis, MN 55432
Phone: (888) 523-1246
Fax: (763) 780-2988
Website: www.ibl-america.com

Email-Address of the qualified person: info@ibl-america.com

1.4. Emergency telephone number

Call your local emergency center.

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: No classification applicable.
Classification according to Regulation (EC) No 1272/2008: The mixtures are not classified according to the CLP regulation.
Information concerning particular hazards for human and environment: The mixtures do not have to be labeled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest version.
Classification system: The mixtures are classified as non-hazardous according to the criteria of Directive 67/548/EEC and Directive 1999/45/EC or Regulation (EC) No 1272/2008.

2.2. Label elements

Labeling according to Regulation (EC) No 1272/2008: Void.
Hazard pictograms: Void.
Signal word: Void.
Hazard statements: Void.

2.3. Other hazards
All chemicals are potentially dangerous. They should only be handled by specially trained personnel.
PBT: Not applicable.
vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures
Description: Mixtures of substances with nonhazardous additions.
Dangerous components: Void.
Additional information: For the wording of the listed risk phrases refer to section 16.

4. FIRST AID MEASURES

4.1. Description of first aid measures
General information: First aider: Pay attention for self-protection! Remove any clothing soiled by the product.
After Inhalation: Remove to fresh air. Consult a doctor in case of complaints.
After skin contact: Immediately rinse with water. If skin irritation continues, consult a doctor.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: Rinse out mouth and drink a glass of water. Do not induce vomiting. If there is any trouble seek medical help.

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.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions. CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
for safety reasons unsuitable extinguishing agents: For this mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture
Ambient fire may liberate hazardous vapours. In the event of fire development of hazardous combustion gases or vapours possible. In case of fire, the following gases can be released: Dioxide, carbon monoxide and carbon dioxide.

5.3. Important Advice for firefighters
Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

6. ACCIDENTAL RELEASE MEASURES

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

6.2. Environmental precautions
Do not allow to enter sewers/ground water or penetrate the soil.

6.3. Methods and material for containment and cleaning up
Absorb with liquid binding material (sand diatomite, acid binders, universal binders, sawdust). Dispose of the material according to regulations.

6.4. Reference to other sections
See section 7 for information on safe handling.
See section 8 for information on personal protection requirement.
See section 13 for disposal information.

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 receptables: Store at a cool place.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions: None.
Recommended storage temperature: 2-8°C

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

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 workplace: The mixtures do not contain any relevant quantities of materials with critical values that have to be monitored at the working place.
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. Keep away from foodstuffs, beverages and feed. Avoid contact with the eyes and skin. Immediately remove all soiled and contaminated clothing.
Individual protection measures: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection:

Not required.

Protection of hands:

Protective gloves – The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Nitrile, thickness: ≥ 0.11 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. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material: Value of the permeation: Level ≥ 6. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles.

Body protection:

Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Property	Calibrators	Substrate Solution	Conjugate	Washing Solution (10x Conc.)	Sample Diluent
General information					
Appearance:					
Form:	fluid	fluid	fluid	fluid	fluid
Colour:	blue	colourless	red	colourless	blue
Odour:	odourless	odourless	odourless	odourless	odourless
Odour threshold:	No information available	No information available	No information available	No information available	No information available
pH-value at 25°C:	6.0 – 7.4	3.3 – 3.8	6.2 – 7.2	6.2 – 7.2	6.0 – 7.4
Change in condition:					
Melting point/ Melting range:	No information available	No information available	No information available	No information available	No information available
Boiling point/ Boiling range	100 °C	No information available	100 °C	100 °C	100 °C
Flash point:	No information available	No information available	No information available	No information available	No information available
Flammability (solid, gaseous)	No information available	No information available	No information available	No information available	No information available
Ignition temperature:					
Decomposition temperature:	No information available	No information available	No information available	No information available	No information available
Self-igniting:	The mixture is not self-igniting	The mixture is not self-igniting	The mixture is not self-igniting	The mixture is not self-igniting	The mixture is not self-igniting
Danger of explosion:	The mixture does not present an explosion hazard	The mixture does not present an explosion hazard	The mixture does not present an explosion hazard	The mixture does not present an explosion hazard	The mixture does not present an explosion hazard
Explosion limits:					
Lower:	No information available	No information available	No information available	No information available	No information available
Upper:	No information available	No information available	No information available	No information available	No information available
Oxidizing properties	No information available	No information available	No information available	No information available	No information available
Vapour pressure at 20 °C:	No information available	No information available	No information available	No information available	No information available
Density:					
Density at 20 °C:	No information available	No information available	No information available	No information available	No information available
Vapour density:	No information available	No information available	No information available	No information available	No information available
Evaporation rate:	No information available	No information available	No information available	No information available	No information available
Solubility in / Miscibility with water:	Fully miscible	Fully miscible	Fully miscible	Fully miscible	Fully miscible
Partition coefficient (n-Octanol/Water)	No information available	No information available	No information available	No information available	No information available
Viscosity:					
Dynamic:	No information available	No information available	No information available	No information available	No information available
Kinematic:	No information available	No information available	No information available	No information available	No information available

9.2. Other information

No further relevant information available.

10. STABILITY AND REACTIVTY

10.1. Reactivity
No information available.

10.2. Chemical stability
Thermal decomposition / conditions to be avoided
No decomposition if used and stored according to specifications.

10.3. Possibility of hazardous reactions
No hazardous reactions known.

10.4. Conditions to avoid
No information available.

10.5. Incompatible materials
No information available.

10.6. Hazardous decomposition products
No dangerous decomposition products known. In case of fire see item 5.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute Toxicity:
LD/LC50 values relevant for classification:
Quantitative data on the toxicity of the mixtures are not available.
Primary irritant effect:
On the skin: No irritating effect known.
On the eyes: No irritating effect known.
After inhalation: No irritating effect known.
Sensitization: No sensitizing effects known.
CMR effects:
Germ cell mutagenicity: No information available.
Carcinogenicity: No information available.
Reproductive toxicity: No information available.
Aspiration hazard:
No aspiration toxicity classification.
Specific target organ toxicity – single exposure:
The mixtures are not classified as specific target organ toxicant, single exposure.
Specific target organ toxicity – repeated exposure:
The mixtures are not classified as specific target organ toxicant, repeated exposure.

Additional toxicological information: We have no description of any toxicological symptoms.

11.2. Further information
The product should be handled with the care usual when dealing with chemicals.
Additional toxicological information: When used and handled according to specifications, the mixtures do not have any harmful effects to our experience and the information provided to us.

12. ECOLOGICAL INFORMATION

12.1. Toxicity
Aquatic toxicity: Quantitative data on the ecological effect of the mixtures are not available.

12.2. Persistence and degradability
No further relevant information available.

12.3. Bio accumulative potential
No further relevant information available.

12.4. Mobility in soil
No further relevant information available.
Ecotoxical effects: Remark: Water hazard class 1 (German Regulation) (Self-assessment) – Do not allow to enter waters, sewers or soil.

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

12.6. Other adverse effects
No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Recommendation: This material and its container must be disposed of as hazardous waste. The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.
Uncleaned packaging:
Recommendation: Die Disposal according to official regulations.
Recommended Cleansing agents: Water, if necessary together with cleansing agents.

14. TRANSPORT INFORMATION

14.1. UN-Number
ADR, IMDG, IATA: Void.

14.2. UN proper shipping name
ADR: Void.
IMDG, IATA: Void

14.3. Transport hazard class(es)
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. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

UN „Model Regulation“: Void.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substances or mixture
National regulations:
Information about limitation of use: Employment restrictions concerning juveniles must be observed.
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2. Chemical safety assessment
A chemical safety assessment has not been carried out.

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: Void.
Department issuing MSDS: Department R & D
Contact: info@ibl-america.com

Abbrevations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
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 Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LD50: Letale Dose, 50 percent (Not relevant for classification)
LC50: Letale concentration, 50 percent (Not relevant for classification)

***Data compared to the previous version altered.**

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: Enzyme immunoassay for the determination of human antibodies against infectious agents – Stop Solution

Article Number: Various (see first page)

Components:
0) *Microtiter Plate*
1) *Substrate Solution*
2) *Conjugate*
3) *Washing Solution (10x Concentrate)*
4) *Sample Diluent*
5) *Calibrators*
6) Stop Solution

Concerning safety the microtiter plate (0) is inoffensive and for this reason not part of this document. The mixtures 1 – 5, due to coincident categorization, are combined as a group and treated separately above. The mixture 6 (Stop Solution) is the object of this safety data sheet and is dealt with below.

1.2. Application of the substance / the preparation

Stop Solution as part of Enzyme immunoassays based on microtiter plate for the detection and determination of human antibodies against infectious agents in serum or plasma.

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier: IMMUNO-BIOLOGICAL LABORATORIES, INC. (IBL-AMERICA)
Address: 8201 Central Ave NE, Suite P
Minneapolis, MN 55432
Phone: (888) 523-1246
Fax: (763) 780-2988
Website: www.ibl-america.com

Email-Address of the qualified person: info@ibl-america.com

1.4. Emergency telephone number

Call your local emergency center.

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:

X_i, Irritant

R36/38:	Irritating to eyes and skin

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

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

Information concerning particular hazards for human and environment: The mixture has to be labelled due to the calculation procedure of the „General Classification guideline for preparations of the EU" in the latest valid version.

Classification system: The classification is according to the latest editions of the EU lists, and extended by company and literature data.

2.2. Label elements

Labeling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation

Hazard pictograms:

GHS05

Signal word: Warning.

Hazard statements:

H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statements:

P280	Wear protective gloves/protective clothing/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.
P362	Take off contaminated clothing and wash before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

PBT:	Not applicable.
vPvB:	Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures
Description: Aqueous solution.
Dangerous components:

CAS No.:	7664-93-9	
Description:	Sulfuric acid	
EINECS:	231-639-5	
Index number:	016-020-00-8	
Elemental Formula:	H_2SO_4	
Molar Mass:	98,08	
Concentration in mixture:	0.5 M	
Classification according to Directive 67/548/EEC or Directive 1999/45/EC:		C R35
Classification according to Regulation (EC) No 1272/2008:		Met Corr. 1 Skin Corr. 1A H290, H314

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

4. FIRST AID MEASURES

4.1. Description of first aid measures

General information: First aider: Pay attention for self-protection!! Remove any clothing soiled by the product.
After Inhalation: Remove to fresh air. I breathing is difficult, give oxygen. Seek medical advice immediately.
After skin contact: Immediately rinse with water. After massive or prolonged skin contact: Seek medical advice.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: Rinse out mouth and drink a glass of water. Do not induce vomiting. If there is any trouble seek medical help.

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.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions. CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
for safety reasons unsuitable extinguishing agents: For this mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture
Ambient fire may liberate hazardous vapours. In the event of fire development of hazardous combustion gases or vapours possible. In case of fire, the following gases can be released: Sulphur dioxide, carbon monoxide and carbon dioxide.

5.3. Important Advice for firefighters
Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Wear protective clothing. Keep away unprotected persons. Avoid eye or skin contact.

6.2. Environmental precautions
Do not allow to enter sewers/ground water or penetrate the soil.

6.3. Methods and material for containment and cleaning up
Absorb with liquid binding material (sand diatomite, acid binders, universal binders, sawdust).
Dispose of the material according to regulations.
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 requirement.
See section 13 for disposal information.

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 receptables: Store at a cool place. Do not store in corrodible metal. Provide acid-resistant floor.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions: None.
Recommended storage temperature: 2-8°C

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

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 workplace:	
7664-93-9 Sulphuric acid	
AGW (Germany):	0.1 E mg/m³ 1 (I); DFG, EU, H, Y
IOELV (EU):	0.05 mg/m³

DNEL values (Sulphuric acid):

workers		
long-term exposition – local effects:		
Inhalative:	DNEL	0.05 mg/m³ (worker)
short-term exposition – local effects:		
Inhalative:	DNEL	0.1mg/m³ (worker)

PNEC values (Sulphuric acid):

PNEC	8.8 mg/L (sewage treatment plant)
	0.002 mg/kg (sea water sediment)
	0.25 mg/L (Meerwasser)
	0.002 mg/kg (Süßwassersediment)
	0.0025 mg/L (fresh water)

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. Keep away from foodstuffs, beverages and feed. Avoid contact with the eyes and skin. Immediately remove all soiled and contaminated clothing.

Individual protection measures: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection:

Required when vapours/areosols are generated.

Protection of hands:

Protective gloves – The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves: Nitrile, thickness: ≥ 0.11 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. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material: Value of the permeation: Level ≥ 6. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles.

Body protection:

Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Property	Stop Solution (0.5 M Sulphuric acid)
General information	
Appearance:	
Form:	fluid
Colour:	colourless
Odour:	odourless
Odour threshold:	No information available
pH-value at 25°C:	~ 0,6
Change in condition:	
Melting point/ Melting range:	No information available
Boiling point/ Boiling range:	100°C
Flash point:	No information available
Flammability (solid, gaseous)	No information available
Ignition temperature:	No information available
Decomposition temperature:	No information available
Self-igniting:	The mixture is not self-igniting
Danger of explosion:	The mixture does not present an explosion hazard
Explosion limits:	
Lower:	No information available
Upper:	No information available
Oxidizing properties	No information available
Vapour pressure at 20 °C:	23 hPa
Density:	
Density at 20 °C:	1,03 g/cm^3
Vapour density:	No information available
Evaporation rate:	No information available
Solubility in / Miscibility with water:	Fully miscible
Partition coefficient (n-Octanol/Water)	No information available
Viskosity:	
Dynamic:	No information available
Kinematic:	No information available

9.2. Other information

No further relevant information available.

10. STABILITY AND REACTIVTY

10.1. Reactivity
See section 10.3.

10.2. Chemical stability
Thermal decomposition / conditions to be avoided
No decomposition if used and stored according to specifications.

10.3. Possibility of hazardous reactions
Reacts with alkali (lyes).

10.4. Conditions to avoid
No information available.

10.5. Incompatible materials
No information available.

10.6. Hazardous decomposition products
No dangerous decomposition products known. In case of fire see item 5.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute Toxicity:
LD/LC50 values relevant for classification: Quantitative data on the toxicity of this product are not available.
Primary irritant effect:
On the skin: Irritant to skin and mucous membranes.
On the eyes: Irritant.
After inhalation: Irritant to skin and mucous membranes.
Sensitization: No sensitizing effects known.
CMR effects:
Germ cell mutagenicity: No information available.
Carcinogenicity: No information available.
Reproductive toxicity: No information available.
Aspiration hazard:
No aspiration toxicity classification.
Specific target organ toxicity – single exposure:
The mixture is not classified as specific target organ toxicant, single exposure.
Specific target organ toxicity – repeated exposure:
The mixture is not classified as specific target organ toxicant, repeated exposure.
Additional toxicological information:
We have no description of any toxicological symptoms.

11.2. Further information
The product should be handled with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity:

Quantitative data on the ecological effect of this product are not available.

12.2. Persistence and degradability

No further relevant information available.

12.3. Bio accumulative potential

No further relevant information available.

12.4. Mobility in soil

No further relevant information available.

Ecotoxical effects:

Remark: Water hazard class 1 (German Regulation) (Self-assessment) – Do not allow to enter waters, sewers or soil.

12.5. Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6. Other adverse effects

No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recommendation: This material and its container must be disposed of as hazardous waste. The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

Uncleaned packaging:

Recommendation: Die Disposal according to official regulations.

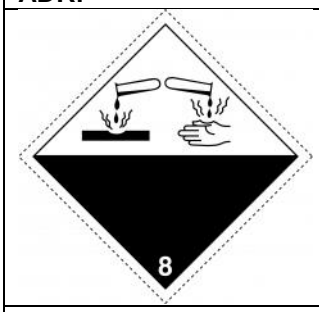
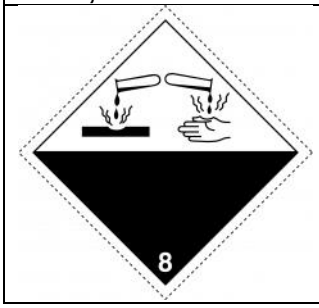
Recommended Cleansing agents: Water, if necessary together with cleansing agents.

14. TRANSPORT INFORMATION

14.1. UN-Number
ADR, IMDG, IATA: UN2796

14.2. UN proper shipping name
ADR: „2796 Battery fluid, acid or Sulphuric acid with not more than 51 percent acid, N.O.S.“
IMDG, IATA: „SULFURIC ACID, N.O.S.”

14.3. Transport hazard class(es)

ADR:	
	**Class:** 8 Corrosive substances **Label:** 8
IMDG, IATA:	
	**Class:** 8 Corrosive Substances **Label:** 8

14.4. Packing group
ADR, IMDG, IATA: II

14.5.Environmental hazards
Marine pollutant: No.

14.6. Special precautions for user
Warning: Corrosive substances.
Danger code (Kemler): 80
EMS number: F-A, S-B

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

Transport/Additional information (ADR)	
Limited quantities (LQ)	5 L
Transport category	3
Tunnel restriction code	E

UN „Model Regulation“: 2796 Battery fluid, acid or Sulphuric acid with not more than 51 percent acid, N.O.S., 8, II

15. REGULATORY INFORMATION

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

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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:

Phrase	Definition
H315	Causes skin irritation.
H319	Causes serious eye irritation.
R36/38	Irritating to eyes and skin.

Department issuing MSDS: Department R & D
Contact: info@ibl-america.com

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
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 Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LD50: Letale Dose, 50 percent (Not relevant for classification)
LC50: Letale concentration, 50 percent (Not relevant for classification)
***Data compared to the previous version altered.**