

ATTACHED SAFETY DATA SHEETS ARE USEABLE FOR:

Catalogue Number:	Product Name:
DE1283	hPL ELISA
DE1289	LH ELISA
DE1469	hCG ELISA
DE1612	Estriol unconjugated ELISA
DE2935	Insulin ELISA
DE4171	TSH ELISA
DESLV3140	17-OH-Progesterone free in Saliva ELISA

Single components with dangerous ingredients:

- **Stop Solution**
According to Article 31 of Regulation (EC) No 1907/2006 a safety data sheet has to be provided upon request where a mixture **does not** meet the criteria for classification as hazardous but contains a substance in a concentration of $\geq 1\%$ posing human health hazards. Therefore the safety data sheet is attached.
- **Substrate Solution ***

The other single components in these products neither contain a substance in a concentration of $\geq 1\%$ posing human health or environmental hazards; nor a substance in a concentration $\geq 0.1\%$ that is carcinogenic category 2 or toxic to reproduction category 1A, 1B and 2, skin sensitizer category 1, respiratory sensitizer category 1, or has effects on or via lactation or is persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB)

Therefore a safety data sheet for the other single components in the kit is not required for these products.

General Precautions:

- The products are for professional laboratory use only.
- Users should have a thorough understanding of the Instructions for Use prior to their use of this kit.
- Good Laboratory Practices (GLP) should be followed to ensure the safe use and disposal of the reagents.
- Never pipet by mouth and avoid contact of reagents and specimens with skin and mucous membranes.
- Do not smoke, eat, drink or apply cosmetics in areas where specimens or kit reagents are handled.
- Wear disposable latex gloves when handling reagents

* Changes with respect to the previous version:

- (a) Product list edited

Trade name: Stop Solution
Product number: Valid for ELISA products listed in the table

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Trade name: Stop Solution

Product number: Valid for ELISA products listed in the table on the first page.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use: Reagent for in vitro laboratory use. For professional use only.

1.3 Details of the supplier of the safety data sheet

Demeditec Diagnostics GmbH	Phone:	+49-(0)431 / 71922 0
Lise-Meitner-Str. 2	Fax:	+49-(0)431 / 71922 55
24145 Kiel	E-Mail:	info@demeditec.de
Germany		www.demeditec.de

1.4 Emergency telephone number

+49-(0)431 / 71922-0 (during opening time: 8:00 h – 16:30 h)

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

This product **does not meet the criteria for classification** in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. However a safety data sheet is being supplied for it upon request as the component contains a substance which presents a health hazard within the meaning of Regulation (EC) No 1272/2008.

2.2 Label elements

No labelling required.

Hazard pictogram(s):	None
Signal word(s):	None
Hazard statement(s):	None
Precautionary statement(s):	None

2.3 Other hazards**Results of PBT and vPvB assessment**

- PBT: Not applicable.
- vPvB: Not applicable.

Trade name: Stop Solution
Product number: Valid for ELISA products listed in the table

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Substances

Not applicable.

3.2 Mixtures
Description:

Mixture of the substances listed below with non-hazardous additions.

Hazardous ingredients:

Substance name	CAS No. (EC No.) [Index No.]	Concentration in the mixture	Classification according to Regulation (EC) No 1272/2008 [CLP] (related to the concentrated form)	
			Hazard class / Hazard categories	Hazard-statement
Kit component:			<i>Stop Solution</i>	
sulphuric acid ... %	7664-93-9 (231-639-5) [016-020-00-8]	< 5.0 %	Skin Corr. 1A	H314

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES
4.1 Description of first aid measures

General information: If symptoms persist or in case of doubt, seek medical advice.
 Following inhalation: Supply fresh air; consult doctor in case of complaints.
 Following skin contact: Remove contaminated clothes and shoes.
 Clean with water and soap. If possible, also wash with polyethylene glycol 400.
 Cover wound with a sterile dressing.
 If skin irritation continues, consult a doctor.
 Following eye contact: Protect unharmed eye.
 Rinse opened eye for several minutes under running water.
 Call a doctor immediately.
 Following swallowing: Rinse mouth with water.
 Spit liquid out again.
 Drink lots of water and provide fresh air. Call a doctor immediately.
 Never give anything by mouth to an unconscious person

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

Symptomatic treatment.

Trade name: Stop Solution
Product number: Valid for ELISA products listed in the table

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing agents:**

The product is not combustible and does not support any combustion.
Use fire fighting measures suiting the environment.

For safety reasons unsuitable extinguishing agents:

No data available

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Sulphur oxides (SO_x)

Poisonous gases/vapours

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing.

Avoid any product contact.

6.2 Environmental precautions

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

6.3 Methods and material for containment and cleaning up

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

Rinse residues with water.

Make sure to recycle or dispose of in suitable receptacles.

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.

Trade name: Stop Solution
Product number: Valid for ELISA products listed in the table

SECTION 7: HANDLING AND STORAGE
7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Avoid contact with eyes and skin. Keep the working area dry and clean.

Information about protection against explosions and fires: Observe the general rules of industrial fire protection.

7.2 Conditions for safe storage, including any incompatibilities
Storage:

Requirements to be met by storerooms and receptacles: Store container tightly sealed at a cool and dry place with sufficient ventilation.

Information about storage in one common storage facility: Store away from foodstuffs. Refer to national regulations for storing hazardous chemicals.

Further information about storage conditions: Store as directed in the relevant instruction for use.

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control parameters

Following information is available for the *substance* listed in section 3.2

Substance:	sulphuric acid				
CAS No.:	7664-93-9				
	Limit value - Eight hours		Limit value - Short term		
Country	ppm	mg/m³	ppm	mg/m³	Legal basis
European Union		0,05 thoracic fraction			Directive 2009/161/EU
Germany (AGS)		0,1 inhalable aerosol		0,1 inhalable aerosol (1)	TRGS 900
Germany (DFG)		0,1 inhalable aerosol		0,1 inhalable aerosol (1)(2)	
Italy		0,05			
Spain		1		3	
USA - NIOSH		1			
USA - OSHA		1			
Remarks					
Germany (AGS)	(1) 15 minutes average value				
Germany (DFG)	(1) 15 minutes average value (2) A momentary value of 0,2 mg/m ³ should not be exceeded				

Source: Based on GESTIS International Limit values Database, 2016-12

8.2 Exposure controls
Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures should be adhered to when handling chemicals. Provide eye bath and emergency shower.

Respiratory Protection: Not required under normal use.

Hand Protection: Protective gloves complying with EN 374 (nitrile rubber, Latex gloves).

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

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye Protection: Safety glasses

Skin Protection: Protective work clothing, lab coat

Trade name: Stop Solution
Product number: Valid for ELISA products listed in the table

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance:	form:	liquid
	colour	colourless
Odour:		odourless
Odour threshold:		not determined
pH:		1.0
Melting point/freezing point:		not determined
Initial boiling point and boiling range:		not determined
Flash point:		not determined
Flammability (solid, gaseous):		Not applicable
Ignition temperature:		
Decomposition temperature:		Not determined
Self ignition temperature:		Product is not self-igniting.
Danger of explosion:		Product does not present an explosion hazard.
Explosion limits:		
Lower:		Not applicable
Upper:		Not applicable
Oxidizing properties:		No data available
Vapour pressure:		Not determined
Density:		Not determined
Relative density:		Not determined
Vapour density:		Not determined
Evaporation rate:		Not determined
Solubility in / Miscibility with		
Water:		Fully miscible
Partition coefficient (n-octanol/water):		Not determined
Viscosity:		Not determined

9.2 Other information

No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

No further relevant information available

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications

10.3 Possibility of hazardous reactions

Corrosive effect on metals

10.4 Conditions to avoid

Heat

10.5 Incompatible materials

Metals

10.6 Hazardous decomposition products

No hazardous decomposition products if instructions for storage and handling are followed.

Trade name: Stop Solution
Product number: Valid for ELISA products listed in the table

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

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

LD/LC 50 values that are relevant for classification:

7664-93-9 sulphuric acid

Oral	LD50	2140 mg/kg (rat)
Inhalative	LC50/4 h	0.375 mg/L (rat)

(aerosol)

Although the LC50 values from the inhalation toxicity study theoretically trigger Classification with 'Toxic by inhalation', classification is not proposed. The effects of sulphuric acid following inhalation are entirely due to local irritation of the respiratory tract: there is no evidence for the systemic toxicity of sulphuric acid in any study as effects are limited to the site of contact. Classification for acute inhalation toxicity is not considered to be appropriate.

Skin corrosion/irritation May cause irritation to the skin.

Serious eye damage/irritation May cause irritation to the eyes.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Additional toxicological information:

After swallowing: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract

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 No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity:

7664-93-9 sulphuric acid

EC50/48h (static) > 100 mg/l (Daphnia magna) (OECD Guideline 202)

LC50/72h (static) > 100 mg/l (Desmodesmus subspicatus) (OECD Guideline 201)

LC50/96h (static) > 16 < 28 mg/l (Lepomis macrochirus)

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

Not applicable

12.6 Other adverse effects

No further relevant information available

Trade name: Stop Solution
Product number: Valid for ELISA products listed in the table

SECTION 13: DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods
Recommendation:

Must be recycled or disposed of according to the regulations. Waste has to be classified according to the European Waste

Catalogue based on the identification of the waste generating source.

Smaller quantities can be disposed of with household waste.

European waste catalogue:

16 00 00 WASTES NOT OTHERWISE SPECIFIED IN THE LIST
 16 05 00 gases in pressure containers and discarded chemicals
 16 05 06* laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
 15 00 00 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
 15 01 00 packaging (including separately collected municipal packaging waste)
 15 01 02 plastic packaging

Uncleaned packagings:
Recommendation:

Disposal must be made according to official regulations.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

Recommended cleansing agent: Water; if necessary, with cleansing agents

SECTION 14: TRANSPORT INFORMATION

14.1 UN No.	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	Void
14.4 Packing group	ADR, IMDG, IATA	Void
14.5 Environmental hazards	Not applicable	
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.	

SECTION 15: REGULATORY INFORMATION

This Safety Data Sheet is according to Commission Regulation (EU) 2015/830 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive 2012/18/EU

Named dangerous substances - ANNEX I Not listed.

National regulations

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water

Further information: None of the ingredients is listed.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

Trade name: Stop Solution
Product number: Valid for ELISA products listed in the table

SECTION 16: OTHER INFORMATION

Complete review for all ELISA products listed in the table.

"H code" used in this safety data sheet

As mentioned in section 3 of the safety data sheet (not relevant for labelling of the product)

H314	Causes severe skin burns and eye damage.
------	--

Abbreviations

- AGS Ausschuss für Gefahrstoffe
- DFG Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission)
- LC50 Lethal concentration, 50 percent
- LD50 Lethal dose, 50 percent
- NIOSH National Institute for Occupational Safety and Health of USA
- OSHA Occupational Safety and Health Administration of USA
- TRGS Technische Regeln für Gefahrstoffe

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association

Trade name: Substrate Solution
Product number: Valid for ELISA products listed in the table

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UN-DERTAKING
1.1 Product identifier

Trade name: Substrate Solution

Product number: Valid for ELISA products listed in the table on the first page.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use: Reagent for in vitro laboratory use. For professional use only.

1.3 Details of the supplier of the safety data sheet

Demeditec Diagnostics GmbH	Phone:	+49-(0)431 / 71922 0
Lise-Meitner-Str. 2	Fax:	+49-(0)431 / 71922 55
24145 Kiel	E-Mail:	info@demeditec.de
Germany		www.demeditec.de

1.4 Emergency telephone number

+49-(0)431 / 71922-0 (during opening time: 8:00 h – 16:30 h)

SECTION 2: HAZARDS IDENTIFICATION
2.1 Classification of the substance or mixture

According the EU-edict (EC) 1272/2008 modified by (EC) 2016/1179 the mixtures are classified as reproductive toxic (Repr. 1B, H360D).

Because of the preservative it may be dangerous for water organisms.

2.2 Label elements

Pictogram



Signal word

Danger!

Hazard class

reproductive toxicity, Repr. 1B

Hazard Statement(s)

H360D: May damage the unborn child.

Precautionary Statement(s)

P280: Wear protective gloves/protective clothing/eye protection/face protection

2.3 Other hazards

No additional facts known.


None of the components is listed as PBT or vPvB relevant.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS
3.1 Substances

These products are mixtures.

3.2 mixtures

Dangerous components according to (EC) 1272/2008:

REACH Regis-ter-number	EINECS	CAS-No.	Name	Percent-age	Symbol	H-statements
01-2119472430-46-XXXX	212-828-1	872-50-4	N-Methyl-2-pyr-rolidone	< 5.0	 Danger!	H315, H319, H335, H360D

The full text of H-statements is in article 16

Trade name: Substrate Solution
Product number: Valid for ELISA products listed in the table

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move the concerned person to fresh air. In case of apnoea, give artificial respiration. Consult a physician.
In case of skin contact	Wash off with plenty of water. Consult a physician.
In case of eye contact	Rinse the opened eye for several minutes with running water, if necessary remove contact lenses. Consult an ophthalmologist.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water, drink in maximum 2 drinking glasses of water, consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable extinguishing media

Use water spray, alcohol resistant foam, solid extinguishing agent or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

The product itself is not inflammable; extinguishing measures should therefore be prepared for an environmental fire.

In case of fire toxic vapours, e.g. nitric oxide, can be released.

5.3 Advice for firefighters

Wear breath protective mask and protective clothes if necessary during fire fighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapour/mist/gas. Care for appropriate ventilation.

6.2 Environmental precautions

Keep away from drains, water or soil.

6.3 Methods and material for containment and cleaning up

Suck up with inert absorbance material and dispose as hazardous waste. Keep in a suitable, closed container.

6.4 Reference to other sections

For disposal considerations see chapter 13.

Trade name: Substrate Solution
Product number: Valid for ELISA products listed in the table

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

No smoking, eating, drinking, chewing gum or storage of food or beverages in the working laboratories.

Wash hands after work. Remove safety clothing before entering a refreshment room.

7.2 Conditions for safe storage, including any incompatibilities

Store tightly closed on a cool dry place. Reseal opened bottles carefully and store in an upright position.

Recommended storage temperature: 2 °C - 8 °C

Storage classification: 12 (non flammable liquids)

segregate from: class 1 (explosives)
class 4.1A (flammable solids)
class 4.3 (dangerous when wet)
class 6.2 (infectious)
class 7 (radioactive)

Further information:

Store separated from foodstuffs.

Protect from unauthorized access.

7.3 Specific end use(s)

Use only in accordance to the manual.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

EINECS	name	limit value according to MAK (TRGS 900)	limit value according to BGW (TRGS 903)
212-828-1	N-Methyl-2-pyrrolidone	82 mg/m ³	150 mg/L urine at the end of a shift, parameter: 5-Hydroxy-N-Methyl-2-pyrrolidone

If the products are used according to the instructions, no air pollution is to be expected.

8.2 Exposure controls

Consider the usual good hygiene and safety practice by handling chemicals.

Pregnant women should strictly avoid inhalation or skin contact.

Personal protective equipment

Eye/face protection: Safety glasses with side shields conforming to EN 166 (EU), NIOSH (US)

Skin protection: protective gloves of nitrile rubber or nature latex, satisfying the norm EN 374

Body protection: impermeable protective clothing, the kind of protective equipment has to be selected depending from concentration and amount of dangerous substance at the specific workplace.

Respiratory protection: not required if used according to the intended use,. In case of a divergent risk assessment use a full-face respirator with multi-purpose combination respirator cartridge Type ABEK (EN 14387).

Environmental exposure controls

Keep away from drains. Avoid contamination of water or soil.

Trade name: Substrate Solution
Product number: Valid for ELISA products listed in the table

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Description	liquid product, slight foaming when shaken
Colour	colourless to slightly bluish
Odour	characteristic
pH-value	3.6 – 3.8
Boiling point	100 °C
Flash point	not applicable
Explosive properties	non
Oxidizing properties	non
Vapour pressure	not measured
Relative density	1.003 g/mL
Solubility	complete soluble/miscible in protic solvents
Water solubility	complete soluble/miscible
Viscosity	not measured

9.2 Other information

No further dangerous properties known.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

No data available.

10.2 Chemical stability

Store at 2 °C - 8 °C

10.3 Possibility of hazardous reactions

If the products are used according to the instructions, no hazardous reactions are to be expected.

10.4 Conditions to avoid

Light, heat, moisture (will not cause a dangerous reaction, but destroys the quality of the products)
See storage conditions chapter 7.2.

10.5 Incompatible materials

Heavy metal salts, complex forming agents and catalases (will not cause a dangerous reaction, but destroys the quality of the products)

10.6 Hazardous decomposition products

There are no dangerous decomposition products known.

Trade name: Substrate Solution
Product number: Valid for ELISA products listed in the table

SECTION 11: TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects

(a) acute toxicity

Component	valuation	value	species
N-Methyl-2-pyrrolidone	LD ₅₀ (oral)	3598 mg/kg	rat
	LC ₅₀ (inhalativ)	>5.1 mg/L	rat

(b) skin corrosion/irritation

Component	valuation	value	species
N-Methyl-2-pyrrolidone	LD ₅₀ (dermal)	8000 mg/kg	rabbit

Risk of skin resorption

- (c) Serious eye damage/irritation
No information available
- (d) Respiratory or skin sensitization
No information available
- (e) Germ cell mutagenicity
No information available
- (f) Carcinogenicity
No information available
- (g) Reproductive toxicity
May damage the unborn child: N-Methyl-2-pyrrolidone (Repr. 1B)
- (h) STOT-single exposure
May cause respiratory irritation.
- (i) STOT-repeated exposure
No specific target organ toxicant, repeated exposure
- (j) Aspiration hazard
No information available

11.2 Further toxicological information

Quantitative data on the toxicity of the mixtures are not available.

Calculation of ATE according to (EC) 1272/2008, Appendix I: see section 15.1

Hazardous properties cannot be excluded but are unlikely when the products are handled appropriately.

Further data: Handle in accordance with good industrial hygiene and safety practice.

Trade name: Substrate Solution
Product number: Valid for ELISA products listed in the table

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

N-Methyl-2-pyrrolidone:

Species	Art	Value
bluegill (<i>Lepomis macrochirus</i>)	LC ₅₀ (mg/l/96h)	832
gold orfe (<i>Leuciscus idus</i>)	LC ₅₀ (mg/l/96h)	> 500
green alga (<i>Desmodesmus subspicatus</i>)	IC ₅₀ (mg/l/72h)	> 500
invertebrates (<i>Daphnia magna</i>)	EC ₅₀ (mg/l/48h)	4897

12.2 Persistence and degradability

Biological degradability:

substance	Value
N-Methyl-2-pyrrolidone	> 90%/20d

easily biologically degradable

12.3 Bioaccumulative potential

Distribution: log P(o/w): ≤ 4 (for N-Methyl-2-pyrrolidone)

There is no bioaccumulation expected

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

None of the components is listed as PBT or vPvB relevant.

12.6 Other adverse effects

No further effects known. If used appropriately, no ecological problems are to be expected

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Products:

Disposal should be made in accordance with national and local regulations and laws.

Packaging:

Emptied packaging can be given to local recycling or waste disposal.

Trade name:	Substrate Solution
Product number:	Valid for ELISA products listed in the table

SECTION 14: TRANSPORT INFORMATION
14.1 UN number

ADR/RID: -	IMDG: -	IATA: -
------------	---------	---------

14.2 UN proper shipping name

ADR/RID: No dangerous goods	IMDG: No dangerous goods	IATA: No dangerous goods
-----------------------------	--------------------------	--------------------------

14.3 Transport hazard class(es)

ADR/RID: -	IMDG: -	IATA: -
------------	---------	---------

14.4 packing group

ADR/RID: -	IMDG: -	IATA: -
------------	---------	---------

14.5 environmental hazards

ADR/RID: No	IMDG: Marine pollutant no	IATA: No
-------------	---------------------------	----------

14.6 special precautions for user

No data available.

14.7 transport in bulk according to Annex II of Marpol73/78 and the IBC code

These products will be shipped only in approved card boxes.

SECTION 15: REGULATORY INFORMATION
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety data sheet meets the requirements of the Regulation (EC) 453/2010 to amending Regulation (EC) 1907/2006 and (EC) 2016/1179 modifying (EC) 1272/2008. The calculated toxicity (ATE) of the mixtures according (EC) 1272/2008, Annex I: 65,900 mg/kg body weight, no classification as toxic According EC 1272/2008, Annex I no classification as hazardous to water. (Calculated L(E)C50 of the mixtures: 8,800 mg/L). Water endangering class according to VwVwS (Germany): Water endangering class 1

Employment limitations: Reference is made to the restrictions of employment specified in the Youth Employment Act and the Maternity Protection Act.

Other regulations, limitations and prohibitive regulations: Substance of very high concern (SVHC) according (EC) 1907/2006 (REACH), Article 57: N-Methyl-2-pyrrolidone (CAS 872-50-4)

15.2 Chemical safety assessment

No data available.

Trade name: Substrate Solution
Product number: Valid for ELISA products listed in the table

SECTION 16: OTHER INFORMATION**"H code" used in this safety data sheet**

As mentioned in section 3 of this safety data sheet

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
H360D	May damage the unborn child.

Categories of the Acute Toxicity (ATE) according EC 1272/2008:

Category 1	$0 < ATE \leq 5$	(oral in mg/kg body weight)
Category 2	$5 < ATE \leq 50$	(oral in mg/kg body weight)
Category 3	$50 < ATE \leq 300$	(oral in mg/kg body weight)
Category 4	$300 < ATE \leq 2.000$	(oral in mg/kg body weight)

Further information:

The information stated above is based on our actual knowledge and is intended to describe our products concerning safety recommendations. The information does not assure product properties and is therefore no basis for legal action.