

**SeramunGelb® medium**

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

**1.1. Product identifier**

Product name: SeramunGelb® medium  
Catalog number: S-016-#-pNPP  
REACH Registration Number: not applicable

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

**Use of the substance/mixture**

Substrate solution for Alkaline Phosphatase (ALP) for use in in vitro test systems.

**Uses advised against**

None identified.

**1.3. Details of the supplier of the safety data sheet**

Company name: Seramun Diagnostica GmbH  
Street: Spreehagener Straße 1  
Place: 15754 Heidensee  
Germany  
Telephone: +49 33767 791-10  
Telefax: +49 33767 791-99  
e-mail: info@seramun.com

**1.4. Emergency telephone number:** +49 33767 791-10 Available only during office hours (9:00 - 15:00).

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Regulation (EC) No. 1272/2008**

Hazard categories:  
Serious eye damage/eye irritation: Eye Dam. 1  
Hazard Statements:  
Causes serious eye damage.

**2.2. Label elements**

**Regulation (EC) No. 1272/2008**

**Hazard components for labelling**

2,2'-iminodiethanol; diethanolamine

**Pictograms:**



**Signal word:** Danger

**Hazard statements**

H318 Causes serious eye damage.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye 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.

**Labelling of packages where the contents do not exceed 125 ml**

**Pictograms:**



**Signal word:** Danger

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### Hazard statements

H318

### Precautionary statements

P280-P305+P351+P338

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
111-42-2	2,2'-iminodiethanol; diethanolamine			3 - < 5 %
	203-868-0	603-071-00-1		
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT RE 2; H302 H315 H318 H373			
75-05-8	acetonitrile; cyanomethane			1 - < 3 %
	200-835-2	608-001-00-3		
	Flam. Liq. 2, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H225 H332 H312 H302 H319			

Full text of H and EUH statements: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

When in doubt or if symptoms are observed, get medical advice.

#### After inhalation

Provide fresh air.

#### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

#### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

#### After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed

No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Suitable extinguishing media: Water mist, Water spray, Dry extinguishing powder, Carbon dioxide (CO<sub>2</sub>).

#### Unsuitable extinguishing media

None identified.

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### 5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire can be released: Nitrogen oxides (NOx), Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Hydrogen cyanide (hydrocyanic acid).

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

### Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothes. Use personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

Wipe up with absorbent material (eg. cloth, fleece). Wash with plenty of water.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Use only in accordance to the manual.

#### Advice on protection against fire and explosion

No special fire protection measures are necessary.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep cool. Protect from sunlight.

#### Hints on joint storage

Do not store together with: Oxidizing agent.

#### Further information on storage conditions

Observe directions on the label.

storage temperature of 2 °C - 8 °C.

### 7.3. Specific end use(s)

Use only in accordance to the manual.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
75-05-8	Acetonitrile	40	68		TWA (8 h)	WEL
		60	102		STEL (15 min)	WEL

### 8.2. Exposure controls

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**Appropriate engineering controls**

Do not breathe gas/fumes/vapour/spray.

**Protective and hygiene measures**

Take off contaminated clothing and wash it before reuse. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

**Eye/face protection**

Eye glasses. Protective goggles with side shield or tightly fitting protective goggles (e.g. EN 166).

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Chemical protective gloves must meet the requirements of European standard EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. The following materials are suitable for protective gloves (permeation time > 480 min):

NBR (Nitrile rubber); >= 0.28 mm thickness

NR (natural rubber, natural latex) >= 0.22 mm thickness

Take recovery periods for skin regeneration.

**Skin protection**

Use of protective clothing. The type of personal protection equipment has to be chosen based on the concentration and amount of the dangerous substance at the workplace.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Use only respiratory protection equipment with CE-symbol including four digit test number.

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	colourless - light yellow
Odour:	odourless
pH-Value (at 20 °C):	8.7-9.3

**Changes in the physical state**

Melting point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	not determined

**Flammability**

Solid:	not applicable
Gas:	not applicable

**Explosive properties**

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined

**Self-ignition temperature**

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

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### Oxidizing properties

Vapour pressure:	The product is not: oxidising. not determined
Density (at 20 °C):	1.021 g/cm <sup>3</sup>
Water solubility:	completely miscible
<b>Solubility in other solvents</b>	not determined
Partition coefficient n-octanol/water:	not determined
Relative vapour density:	not determined
Evaporation rate:	not determined

### 9.2. Other information

Solid content:	not determined
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

Light-sensitive. Keep away from heat. Stable under recommended storage and handling conditions.

### 10.5. Incompatible materials

Avoid contact with strong oxidizing agents and metals.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

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

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
111-42-2	2,2'-iminodiethanol; diethanolamine					
	oral	LD50	676 mg/kg	Rat		
	dermal	LD50	8328 mg/kg	Rabbit		
75-05-8	acetonitrile; cyanomethane					
	oral	ATE	500 mg/kg			
	dermal	LD50	988 mg/kg	Rabbit	IUCLID	
	inhalation vapour	ATE	11 mg/l			
	inhalation aerosol	ATE	1,5 mg/l			

#### Irritation and corrosivity

Causes serious eye damage.

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

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

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

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### STOT-single exposure

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

### STOT-repeated exposure

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

### Aspiration hazard

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

### Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
111-42-2	2,2'-iminodiethanol; diethanolamine					
	Acute algae toxicity	ErC50 75 mg/l	72 h	Scenedesmus sp.		
	Acute crustacea toxicity	EC50 110 mg/l	48 h	Daphnia magna		
75-05-8	acetonitrile; cyanomethane					
	Acute fish toxicity	LC50 1640 mg/l	96 h	Pimephales promelas	IUCLID	

### 12.2. Persistence and degradability

The product has not been tested.

### 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
111-42-2	2,2'-iminodiethanol; diethanolamine	-1,43
75-05-8	acetonitrile; cyanomethane	-0,34

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Other adverse effects

No information available.

### Further information

Avoid release to the environment. There are no data available on the mixture itself.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

#### List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

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**List of Wastes Code - used product**

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste

**List of Wastes Code - contaminated packaging**

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

**Contaminated packaging**

Wash with plenty of water. Completely emptied packages can be recycled.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information**

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC): 1,469 % (15 g/l)

2004/42/EC (VOC): 1,469 % (15 g/l)

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Information according to 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

### National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

1 - slightly hazardous to water

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### Changes

Complete revision.

### Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

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

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

VOC: Volatile Organic Compounds

### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Eye Dam. 1; H318	Calculation method



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**Relevant H and EUH statements (number and full text)**

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*