

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

Product form : Mixture  
 Product Name : RNARetain® CE-LAB REAGENTS. 1 mL, 5 mL, 6 mL  
 Product Reference # : 74006, 74003, 44005

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

Use of the substance/mixture : Lab Reagents.

**1.2.2. Uses advised against**

No additional information available

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

Asuragen, Inc.  
 2150 Woodward Ave Suite 100  
 Austin, TX 78744  
 T: +1 512-681-5200  
 USA, Toll-free T: +1 877-777-1874  
 E-mail: support@asuragen.com  
 Web address: www.asuragen.com

**1.4. Emergency telephone number**

Emergency number : Tel: +1 -512-681-5200 US, Toll-free Tel: 1-877-777-1874

**SECTION 2: Hazards identification**
**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

**Adverse physicochemical, human health and environmental effects**

No additional information available

**2.2. Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

**2.3. Other hazards**

No additional information available

**SECTION 3: Composition/information on ingredients**
**3.1. Substance**

Not applicable

**3.2. Mixture**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ammonium sulfate	(CAS No) 7783-20-2 (EC no) 231-984-1	30 - 60	Not classified
Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, disodium salt, dihydrate	(CAS No) 6381-92-6 (EC no) 613-386-6	0,1 - 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412

Full text of H-statements: see section 16

# RNARetain® CE-LAB REAGENTS. 1 mL, 5 mL, 6 mL

## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).
- First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- First-aid measures after skin contact : Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
- First-aid measures after eye contact : Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if redness, pain, or irritation occurs.
- First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : May cause eye irritation.
- Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.
- Chronic symptoms : None expected under normal conditions of use.

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

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

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

- Fire hazard : Not flammable.
- Explosion hazard : Product is not explosive.
- Reactivity : Hazardous reactions will not occur under normal conditions.

#### 5.3. Advice for firefighters

- Precautionary measures fire : Exercise caution when fighting any chemical fire.
- Firefighting instructions : Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Refer to Section 9 for flammability properties.

### SECTION 6: Accidental release measures

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

- General measures : Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapour, mist, spray).

##### 6.1.1. For non-emergency personnel

- Protective equipment : Use appropriate personal protection equipment (PPE).
- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

# RNARetain® CE-LAB REAGENTS. 1 mL, 5 mL, 6 mL

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

Technical measures : Comply with applicable regulations.  
Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.  
Incompatible products : Strong acids. Strong bases. Strong oxidizers. Alkalis.

### 7.3. Specific end use(s)

Lab Reagents.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Ammonium sulfate (7783-20-2)

Bulgaria	OEL TWA (mg/m <sup>3</sup> )	10,0 mg/m <sup>3</sup>
----------	------------------------------	------------------------

### 8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal protective equipment : Protective goggles. Gloves. Protective clothing.



Materials for protective clothing : Chemically resistant materials and fabrics.  
Hand protection : Wear chemically resistant protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Skin and body protection : Wear suitable protective clothing.  
Respiratory protection : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.  
Environmental exposure controls : Do not allow the product to be released into the environment.  
Consumer exposure controls : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

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

Physical state : Liquid  
Colour : No data available  
Odour : No data available  
Odour threshold : No data available  
pH : No data available  
Evaporation rate : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapour pressure : No data available  
Relative vapour density at 20 °C : No data available  
Solubility : No data available  
Partition coefficient: n-octanol/water : No data available  
Viscosity : No data available

# RNARetain® CE-LAB REAGENTS. 1 mL, 5 mL, 6 mL

## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Explosive properties : No data available  
Oxidising properties : No data available  
Explosive limits : No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Incompatible materials.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizers. Alkalis.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>). Thermal decomposition generates: Emits ammonia vapors.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### Ammonium sulfate (7783-20-2)

LD50 oral rat	> 2000 mg/kg
---------------	--------------

#### Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, disodium salt, dihydrate (6381-92-6)

ATE CLP (oral)	500,00 mg/kg bodyweight
ATE CLP (dermal)	1.100,00 mg/kg bodyweight
ATE CLP (dust,mist)	1,50 mg/l/4h

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
Specific target organ toxicity (single exposure) : Not classified  
Specific target organ toxicity (repeated exposure) : Not classified  
Aspiration hazard : Not classified  
Symptoms/Injuries After Inhalation : May cause respiratory irritation.  
Symptoms/Injuries After Skin Contact : May cause skin irritation.  
Symptoms/Injuries After Eye Contact : May cause eye irritation.  
Symptoms/Injuries After Ingestion : Ingestion is likely to be harmful or have adverse effects.  
Chronic Symptoms : None expected under normal conditions of use.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life.

#### Ammonium sulfate (7783-20-2)

LC50 fish 1	5,2 (5,2 - 8,2) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	32,2 (32,2 - 41,9) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

### 12.2. Persistence and degradability

No additional information available

# RNARetain® CE-LAB REAGENTS. 1 mL, 5 mL, 6 mL

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## 12.3. Bioaccumulative potential

### Ammonium sulfate (7783-20-2)

Log Pow	-5,1 (at 25 °C)
---------	-----------------

## 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued. In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not regulated for transport				
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

### 14.6. Special precautions for user

No additional information available

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

### Ammonium sulfate (7783-20-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Revision date: : 04/02/2019

# RNARetain® CE-LAB REAGENTS. 1 mL, 5 mL, 6 mL

## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Data sources : According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

EU GHS SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*