

Materials Safety Data Sheet

09.06.2010

1. Identification of the Substance/Preparation and of the Company/undertaking

Trade name and synonyms Protein Silver-Staining-Kit	Manufacturer gelcompany GmbH Paul-Ehrlich-Straße 17 D-72076 Tübingen Emergency telephone number: +49 (0)7071 257030	
Catalogue No. 1004-14	CAS No. Prod	
Description Preparation	Area of Application: Product Use:	Industrial Application. Analytical chemistry. Research use only.

2. Composition/Information on Ingredients

Chemical family Silver Nitrate, Sodium Carbonate, Glutaraldehyde, Formaldehyde
Appearance Solution, no colour

Principal hazardous component(s)	EC-No.	CAS - No. Comp	Conc. (%)	Classification
Silver Nitrate	231-8539	7761-88-8	10.0	C;N R34 R50/53
Sodium Carbonate	207-838-8	497-19-8	25.0	R36; S22-26
Glutardialdehyde	203-856-5	111-30-8	25.0	T,N R23/25-34-42/43-50 S(1/2)-26-36/37/39-45-61
Formaldehyde	200-001-8	50-00-0	37.0	T,N R23/24/25-34-40-43 S(1/2)-26-36/37/39-45-51

3. Hazards Identification

Routes of entry	Effects of Occupational Overexposure
Inhalation Eye contact Skin contact Ingestion	

4. First-Aid Measures

Inhalation: Eyes: Skin: Ingestion:	Remove from exposure, obtain medical attention Wash thoroughly with water for 15 min., obtain medical attention. Wash off with water Wash out mouth with water and if conscious give water to drink. Obtain medical attention at once.
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5. Fire-Fighting Measures

Extinguishing media

Carbon dioxide, dry chemicals or water spray

Special fire fighting procedures

None.

Unusual fire and explosive hazards

None

6. Accidental Release Measures

Steps to be taken if material is released or spilled

Wipe up and place in containers for disposal. Clean spill area with detergent and water.

7. Handling and Storage

Precautions to be taken in handling and storage etc

Store at +15°C to +25°C

8. Exposure Controls/Personal Protection

Exposure limit

MAK: 0.01 mg/m³

Ventilation requirements

Normal ventilation

Special personal protection equipment

None

Respiratory

Fume Hood

Eye

Safety goggles

Hand Protection

Gloves

Other clothing or equipment

None

9. Physical and Chemical Properties

Formula AgNO ₃ , Na ₂ CO ₃ C ₅ H ₈ O ₂ CH ₂ O	Vapour pressure N/A 0.27 hPa 1.3 hPa	Melting point N/A -6 °C -117°C
Boiling point 760 mm Hg 95°C-100°C	Molecular weight AgNO ₃ 169.9; Na ₂ CO ₃ 106.0 C ₅ H ₈ O ₂ 100.1, CH ₂ O 30.0	Flash point N/A > 100°C, > 62°C
Specific gravity	Solubility in water (at 20° C) AgNO ₃ 170 g/l; Na ₂ CO ₃ 220 g/l C ₅ H ₈ O ₂ , CH ₂ O soluble	

10. Stability and Reactivity

Stability (normal conditions) Stable	Hazardous polymerization Will Not Occur	Conditions to avoid None
Incompatibility materials to avoid Avoid contact with reducing and oxidising agents		
Hazardous decomposition products		

N/A.

11.Toxicological Information

Toxicity Information

Silver nitrate LD50 rat (oral) 1173 mg/kg; Sodium Carbonate LD50 dto 4090 mg/kg
Glutaraldehyde LD50 dto 134 mg/kg, Formaldehyde LD50 dto 800 mg/kg

12.Ecological Information

Hazardous to waters

13.Disposal Considerations

Waste disposat method

Dispose as per local, state or federal regulations

14.Transport Information

UN-No	ADR/RID	Class	Compound No	Packing Group
1493 / 2922 / 2209	8 / 5.1			
Dangerous goods Yes				

15.Regulatory Information

See point 2. Classification

16.Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Enquiries regarding MSDS Content should be directed to:

gelcompany office.

For research use only. Not for drug, household or any other use.

DIN M-1004-14-10