

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/15/2023

Reviewed on 02/15/2023

## 1 Identification

- **Product identifier**
- **Trade name:** SERVA Purple, 250x concentrate
- **Article number:** 43386
- **CAS Number:**  
75-05-8
- **EC number:**  
200-835-2
- **Index number:**  
608-001-00-3
- **Application of the substance / the mixture:** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
SERVA Electrophoresis GmbH  
Carl-Benz-Str. 7  
D-69115 Heidelberg  
Tel.: +49 6221 13840-0  
FAX: +49 6221 13840-10  
msds.info@serva.de
- **Information department:** Product Safety department Tel.: +49 6221 13840-35
- **Emergency telephone number:**  
Medical Emergency Information in case of poisoning:  
Poison Information Center Mainz - Phone: +49 (0) 6131 19240  
(advisory service in German or English language)

**SERVA**  
■ serving scientists ■

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Acute Toxicity - Dermal 4

H312 Harmful in contact with skin.

Acute Toxicity - Inhalation 4

H332 Harmful if inhaled.

Eye Irritation 2A

H319 Causes serious eye irritation.

- **Label elements**

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:** GHS02, GHS07

- **Signal word:** Danger

- **Hazard-determining components of labeling:**

Acetonitrile

- **Hazard statements:**

Highly flammable liquid and vapor.

Harmful if swallowed, in contact with skin or if inhaled.

Causes serious eye irritation.

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· **Precautionary statements**

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If swallowed: Call a poison center/doctor if you feel unwell.
- If on skin: Wash with plenty of soap and water.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Store in a well-ventilated place. Keep cool.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment:**

- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.

### \* 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description:**  
75-05-8 Acetonitrile
- **Identification number(s):**
- **EC number:** 200-835-2
- **Index number:** 608-001-00-3
- **Description:** fluorescence dye in acetonitrile

### \* 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

In case of unconsciousness place patient stably in side position for transportation.  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly. Consult doctor if you feel unwell.

· **After eye contact:**

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.

· **After swallowing:** Wash out mouth. Call a doctor immediately.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
Flammable substance, vapours are heavier than air and spread over the floor. Accumulation in low areas is possible.  
In case of fire, the following can be released:  
Nitrogen oxides (NOx)  
Carbon monoxide and carbon dioxide  
Hydrogen cyanide (HCN)
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation
- **Environmental precautions:**  
Prevent seepage into sewage system, workpits and cellars.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up**  
Dispose contaminated material as waste according to item 13.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Protective Action Criteria for Chemicals**

<b>· PAC-1:</b>	
	13 ppm

<b>· PAC-2:</b>	
	50 ppm

<b>· PAC-3:</b>	
	150 ppm

- **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.

## 7 Handling and storage

- **Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**  
Protect against electrostatic charges.  
Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store only in the original receptacle.  
Store at -15 to -25 °C  
Store in a cool location.
- **Information about storage in one common storage facility:** Do not store together with oxidizing materials.
- **Further information about storage conditions:** Keep receptacle tightly sealed and store in dry conditions.

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· **Specific end use(s):** No further relevant information available.

## 8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**75-05-8 Acetonitrile (80-100%)**

PEL Long-term value: 70 mg/m<sup>3</sup>, 40 ppm

REL Long-term value: 34 mg/m<sup>3</sup>, 20 ppm

TLV Long-term value: 20 ppm

Skin, A4

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Additional information about design of technical systems:** No further data; see item 7.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Store protective clothing separately.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

· **Breathing equipment:**

Short term filter device:

Filter ABEK/ P3

· **Protection of hands:**

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

Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves:**

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.

· **Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Neoprene gloves

· **Eye protection:** Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information:**

· **Color:** Yellow

· **Odor:** Pungent

· **Odor threshold:** Not determined.

· **Melting point/Melting range:** -45 °C (-49 °F)

· **Boiling point/Boiling range:** 82 °C (179.6 °F)

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· <b>Flammability (solid, gaseous):</b>	Highly flammable.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	3 Vol %
· <b>Upper:</b>	16 Vol %
· <b>Flash point:</b>	2 °C (35.6 °F)
· <b>Ignition temperature:</b>	525 °C (977 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH-value:</b>	Mixture is non-polar/aprotic.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity:</b>	Not determined.
· <b>Dynamic viscosity at 20 °C (68 °F):</b>	0.39 mPas
· <b>Solubility in / Miscibility with:</b>	
· <b>Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	no information available
· <b>Vapor pressure at 20 °C (68 °F):</b>	97 hPa (72.8 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	0.78 g/cm <sup>3</sup> (6.5091 lbs/gal)
· <b>Relative density:</b>	no information available
· <b>Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Solution
· <b>Important information on protection of health and environment, and on safety:</b>	
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>VOC content:</b>	0.00 %
· <b>Molecular weight</b>	41.05 g/mol

## 10 Stability and reactivity

- **Reactivity:** No further relevant informations available
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No further relevant informations available.
- **Conditions to avoid:** Avoid high temperatures, flames, sparks
- **Incompatible materials:** Avoid contact with: strong oxidizers, strong acids, strong alkali
- **Hazardous decomposition products:** In case of fire: See Section 5

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Harmful if swallowed, in contact with skin or if inhaled.

### · **LD/LC50 values that are relevant for classification:**

#### 75-05-8 Acetonitrile

Oral	LD50	2,460 mg/kg (rat)
Dermal	LD50	980 mg/kg (rbt)
Inhalative	LC50/4h	29 mg/l (rat)
	LC50/96h	1,000 mg/l (trout)

- **on the eye:** Causes serious eye irritation.

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· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity:**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability:** No further relevant information available.

· **Bioaccumulative potential:** No further relevant information available.

· **Mobility in soil:** No further relevant information available.

· **Results of PBT and vPvB assessment:**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects:**

· **Additional ecological information:**

· **General notes:**

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

Water hazard class 2 (Assessment by list): hazardous for water

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Disposal must be made according to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:**

Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA** UN1648

· **UN proper shipping name**

· **DOT** Acetonitrile solution

· **ADR** 1648 ACETONITRILE solution

· **IMDG, IATA** ACETONITRILE solution

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· **Transport hazard class(es)**· **DOT**

· **Class** 3 Flammable liquids  
 · **Label** 3

· **ADR, IMDG, IATA**

· **Class:** 3 Flammable liquids  
 · **Label:** 3

· **Packing group**· **DOT, ADR, IMDG, IATA** II· **Environmental hazards**· **Marine pollutant:** No· **Special precautions for user** Warning: Flammable liquids· **Hazard identification number (Kemler code):** 33· **EMS Number:** F-E,S-D· **Stowage Category** B· **Stowage Code** SW2 Clear of living quarters.

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

· **Transport/Additional information:**· **ADR**

· **Excepted quantities (EQ)** Code: E2  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 500 ml

· **IMDG**· **Limited quantities (LQ)** 1L

· **Excepted quantities (EQ)** Code: E2  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN 1648 ACETONITRILE SOLUTION, 3, II

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
 No further relevant information available.

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

75-05-8 Acetonitrile

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· **TSCA (Toxic Substances Control Act):**

ACTIVE

· **Hazardous Air Pollutants**

75-05-8 Acetonitrile

· **Proposition 65**

None of the ingredients is listed.

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

CBD, D

· **TLV (Threshold Limit Value)**

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms** GHS02, GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Acetonitrile

· **Hazard statements**

Highly flammable liquid and vapor.

Harmful if swallowed, in contact with skin or if inhaled.

Causes serious eye irritation.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin: Wash with plenty of soap and water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **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.

· **Department issuing SDS:** Product safety department

· **Contact:** +49 6221 13840-35

· **Date of preparation / last revision** 02/15/2023

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**· 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)*

*ICAO: International Civil Aviation Organisation*

*PBT: persistent, bioaccumulative, toxic substance (REACH)*

*vPvB: very persistent, very bioaccumulative substance (REACH)*

*REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals*

*CLP: Regulation on classification, labelling and packaging of substances and mixtures*

*bw: body weight*

*ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Flammable Liquids 2: Flammable liquids – Category 2*

*Acute Toxicity - Oral 4: Acute toxicity – Category 4*

*Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A*