Printing date 08/17/2022 Reviewed on 08/17/2022

# 1 Identification

- · Product identifier
- · Trade name: Anti-Corrosive Additive
- · Article number: 43392
- · 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)

# 2 Hazard(s) identification

· Classification of the substance or mixture



GHS08

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- · Label elements
- · GHS label elements

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

- · Hazard pictograms: GHS07, GHS08
- · Signal word: Warning
- · Hazard-determining components of labeling:

Ethanediol

· Hazard statements:

Harmful if swallowed.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Do not breathe mist/vapours/spray.

Wash thoroughly after handling.

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

Rinse mouth.

Get medical advice/attention if you feel unwell.

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

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0

Fire = 1

Reactivity = 0

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# Safety Data Sheet acc. to OSHA HCS

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· HMIS-ratings (scale 0 - 4)

HEALTH 1 Health = 1FIRE 1 Fire = 1REACTIVITY 0 Reactivity = 0

- · 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: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous o	components:	
107-21-1	Ethanediol	80-100%
17265-14-4	Disodium sebacate	2.5-7%
29385-43-1	methyl-1H-benzotriazole	0.1-0.2%
64665-57-2	sodium 4(or 5)-methyl-1H-benzotriazolide	0.1-0.2%

· Additional information:

the product contains no further substances which shall be indicated according to REACH-Regulation (Regulation (EC) No. 1907/2006).

For the wording of the listed hazard phrases refer to section 16.

### 4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · 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:

Rinse out mouth and then drink plenty of water.

Immediately call a doctor.

- · 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.

## 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

In case of fire formation of harmful vapours and of fumes/ mist is possible.

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

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## 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Ensure adequate ventilation

- · Environmental precautions: 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

1.0100111011	cuon Cruciu for Cuenicuis	
· <i>PAC-1</i> :		
107-21-1	Ethanediol	30 ppm
29385-43-1	methyl-1H-benzotriazole	2 mg/m³
64665-57-2	sodium 4(or 5)-methyl-1H-benzotriazolide	$1.9 \text{ mg/m}^3$
· PAC-2:		
107-21-1	Ethanediol	150 ppm
29385-43-1	methyl-1H-benzotriazole	22 mg/m <sup>3</sup>
64665-57-2	sodium 4(or 5)-methyl-1H-benzotriazolide	21 mg/m³
· PAC-3:		
107-21-1	Ethanediol	900 ppm
29385-43-1	methyl-1H-benzotriazole	$130 \text{ mg/m}^3$
64665-57-2	sodium 4(or 5)-methyl-1H-benzotriazolide	$130 \text{ mg/m}^3$

### · 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: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed and store in dry conditions.
- · 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:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

 	T
107-21	-1 Ethanediol (80-100%)
	Short-term value: 10** mg/m³, 50* ppm
	Long-term value: 25* ppm
	*vapor fraction: **inh. fraction, aerosol only, A4
WEEL	I(2)

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

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- · 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.

### · Breathing equipment:

Short term filter device:

Filter A/P2

#### · Protection of hands:

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

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.

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material:

The exact break trough 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:

Nitrile rubber, NBR Chloroprene rubber, CR • Eye protection: Safety glasses

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information:

· Color: Pink

· Odor: Recognizable

· Odor threshold: no information available

Melting point/Melting range:
 Boiling point/Boiling range:
 Flammability (solid, gaseous):

-16 °C (3.2 °F)
>160 °C (>320 °F)
no information available

· Explosion limits:

Lower: 3.2 Vol %
 Upper: 43 Vol %

Flash point:
 Decomposition temperature:
 no information available

• pH-value at 20 •C (68 •F): 8.2-8.6

· Viscosity:

• *Kinematic viscosity:* Not determined.

· Dynamic viscosity: no information available

· Solubility in / Miscibility with:

• Water at 20 °C (68 °F): 1000 g/l

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• Partition coefficient (n-octanol/water): no information available
 • Vapor pressure at 20 °C (68 °F): 0.053 hPa (0 mm Hg)

• Density at 20 °C (68 °F): 1.122-1.125 g/cm³ (9.36309-9.38813 lbs/gal)

· Relative density: Not determined.

· Other information

· Appearance:

· Form: Solution

Important information on protection of health and

environment, and on safety:

• Ignition temperature: 410 °C (770 °F)
 • Danger of explosion: Not determined.

· **VOC** %:

• **VOC content:** 0.00 %

# 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 dangerous reactions known.
- · Conditions to avoid: No further relevant information available.
- · Incompatible materials:

Avoid contact with:

Strong oxidizers

hydroxides of alkaline metals

· Hazardous decomposition products: In case of fire: See Section 5

# 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity: Harmful if swallowed.

· LD/LC50 values	that	are re	levant fo	or classifi	cation:
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#### 107-21-1 Ethanediol

Oral	<i>LD50</i>	4,700 mg/kg (rat)
Dermal	LD50	10,620 mg/kg (rbt)
	LC50/96h	>18,500 mg/l (trout)

Specific target organ toxicity - repeated exposure:

May cause damage to organs through prolonged or repeated exposure.

· Other information (about experimental toxicology)

experience concerning human exposure to 1,2-ethanediol:

the substance may cause adverse effects on kidneys through repeated oral exposure or through repeated dermal exposure to large amounts.

- · 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.

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### · 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:

DOC decrease >70% (28 d)

Easily biodegradable

- · Bioaccumulative potential: The bioaccumulative potential is considered to be low.
- · 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 1 (Self-assessment): slightly 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.

· UN-Number · ADR, IMDG, IATA	Void
UN proper shipping name ADR, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class:	Void
· Label:	-
· Packing group	
· ADR, IMDG, IATA	Void
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Not applicable.

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· Transport/Additional information:

Not dangerous according to the above specifications.

## 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):

107-21-1 Ethanediol

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

107-21-1 Ethanediol

· 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:

107-21-1 Ethanediol

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

107-21-1 Ethanediol

A4

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

None of the ingredients is listed.

· GHS label elements

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

- · Hazard pictograms GHS07, GHS08
- · Signal word Warning
- · Hazard-determining components of labeling:

Ethanediol

· Hazard statements

Harmful if swallowed.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Do not breathe mist/vapours/spray.

Wash thoroughly after handling.

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

Rinse mouth.

Get medical advice/attention if you feel unwell.

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

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· 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 08/17/2022 / 2
- · 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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified 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

Acute Tox. 4: Acute toxicity - Category 4

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

US