Printing date 05/04/2018

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Reviewed on 02/22/2010

Identification	
Product identifier	CFDI <i>I</i> A
Trade name: Collagen R solution 0.4 %	SERVING scientists
Article number: 47256 Application of the substance / the mixture Laborato	ory 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	Gmbh
Information department: Product Safety department Emergency telephone number: Medical Emergency Information in case of poisoning Poison Information Center Mainz - Phone: +49 (0) 6 (advisory service in German or English language)	g. 5
Hazard(s) identification	
Skin Corr. 1A H314 Causes severe skin burns and e Eye Dam. 1 H318 Causes serious eye damage.	eye damage.
<ul> <li>Label elements</li> <li>GHS label elements</li> <li>The product is classified and labeled according to the</li> <li>Hazard pictograms GHS05</li> <li>Signal word Danger</li> <li>Hazard statements</li> <li>Causes severe skin burns and eye damage.</li> </ul>	e Globally Harmonized System (GHS).
Precautionary statements Do not breathe dusts or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protect If swallowed: Rinse mouth. Do NOT induce vomiting	
Do not breathe dusts or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protect If swallowed: Rinse mouth. Do NOT induce vomiting If on skin (or hair): Take off immediately all contami IF INHALED: Remove person to fresh air and keep of	nated clothing. Rinse skin with water/shower.

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# Safety Data Sheet acc. to OSHA HCS

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· Classification system:

· NFPA ratings (scale 0 - 4)

$$\begin{array}{c} \textbf{Health} = 3\\ \textbf{Fire} = 0\\ \textbf{Reactivity} = 0 \end{array}$$

· HMIS-ratings (scale 0 - 4)

HEALTH 3 Health = 3Fire = 0FIRE 0 REACTIVITY 0 Reactivity = 0

· Other hazards Contains 0,1 % acetic acid

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- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

# **3** Composition/information on ingredients

- · Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

### 4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:
- Rinse out mouth and then drink plenty of water.
- If symptoms persist consult doctor.
- · Information for 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

### **6** Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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• Reference to other sections No dangerous substances are released.

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

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

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Suitable respiratory protective device recommended.
- · 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. 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:

Natural rubber, NR Nitrile rubber, NBR

- · Eye protection: Safety glasses
- · Body protection: Protective work clothing

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Physical and chemical prope	rties
· Information on basic physical o · General Information	and chemical properties
Appearance:	
Form:	Solution
Color:	Colorless
· Odor:	Characteristic
• pH-value at 20 •C (68 •F):	1.5 - 2.5
Change in condition Melting point/Melting range: Boiling point/Boiling range:	
Flash point:	Not applicable.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Density at 20 °C (68 °F):	ca. 1 g/cm <sup>3</sup> (ca. 8.345 lbs/gal)
Solubility in / Miscibility with Water:	Fully miscible.
· Solvent content:	
Organic solvents:	0.1 %
VOC content:	0.1 %
Solids content:	2 - 4 %
• Other information	<i>No further relevant information available.</i>

# 10 Stability and reactivity

· Reactivity No further relevant information 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: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### **11 Toxicological information**

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

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US

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· 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.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- $\cdot$  **Mobility in soil** No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

## **13 Disposal considerations**

#### · Waste treatment methods

· Recommendation:

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

· Uncleaned packagings:

- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

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14 Trans	port in	formation

· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

Reviewed on 02/22/2010 Printing date 05/04/2018 Trade name: Collagen R solution 0.4 % (Contd. of page 5) · UN "Model Regulation": Void 15 Regulatory information · Safety, health and environmental regulations/legislation specific for the substance or mixture · Section 355 (extremely hazardous substances): None of the ingredients is listed. · Section 313 (Specific toxic chemical listings): None of the ingredients is listed. · TSCA (Toxic Substances Control Act): All ingredients are listed. · 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. · Cancerogenity categories · EPA (Environmental Protection Agency) None of the ingredients is listed. • TLV (Threshold Limit Value established by ACGIH) None of the ingredients is listed. · 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 GHS05 · Signal word Danger · Hazard statements Causes severe skin burns and eye damage. · Precautionary statements Do not breathe dusts or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 7)

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· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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Othe.	r information
	information is based on our present knowledge. However, this shall not constitute a guarantee for a fict product features and shall not establish a legally valid contractual relationship.
Depa	rtment issuing SDS: Product safety department
	act: +49 6221 13840-35
Date	of preparation / last revision 05/04/2018 / 2
	eviations and acronyms:
RID: R Interna	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning ational Transport of Dangerous Goods by Rail)
	International Civil Aviation Organisation
	persistent, bioaccumulative, toxic substance (REACH)
	very persistent, very bioaccumulative substance (REACH)
	H: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation on classification, labelling and packaging of substances and mixtures
	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the Internati
	ge of Dangerous Goods by Road)
	: International Maritime Code for Dangerous Goods
	US Department of Transportation
	International Air Transport Association
ACGIE	H: American Conference of Governmental Industrial Hygienists
EINEC	S: European Inventory of Existing Commercial Chemical Substances
	S: European List of Notified Chemical Substances
	Chemical Abstracts Service (division of the American Chemical Society)
	National Fire Protection Association (USA)
	Hazardous Materials Identification System (USA)
	Volatile Organic Compounds (USA, EU)
	Persistent, Bioaccumulative and Toxic
	very Persistent and very Bioaccumulative I: National Institute for Occupational Safety
	: Occupational Safety & Health
	Threshold Limit Value
	Permissible Exposure Limit
	Recommended Exposure Limit
	orr. 1A: Skin corrosion/irritation – Category 1A
	m. 1: Serious eve damage/eve irritation – Category 1