Printing date 05/03/2018

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Reviewed on 05/03/2018

Identification	
Product identifier	CEDI IV
Trade name: Octenidin Dihydrochloride	JERVA
	serving scientists
Article number: 33107	<u>ــــــــــــــــــــــــــــــــــــ</u>
CAS Number: 70775-75-6	
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	C^{λ}
D-69115 Heidelberg	
<i>Tel.:</i> +49 6221 13840-0	
FAX: +49 6221 13840-10	. 63
msds.info@serva.de	
-	13840 35
Information department: Product Safety department Tel.: +49 6221 Emergency telephone number:	1.JU#0-JJ
Medical Emergency Information in case of poisoning:	
Poison Information Center Mainz - Phone: +49 (0) 6131 19240	
(advisory service in German or English language)	
Hazard(s) identification	
Acute Tox. 4 H302 Harmful if swallowed.	
Acute Tox. 4 H332 Harmful if inhaled.	
Skin Irrit. 2 H315 Causes skin irritation.	
Eye Irrit. 2A H319 Causes serious eye irritation.	
STOT SE 3 H335 May cause respiratory irritation.	
Label elements	
GHS label elements	
The substance is classified and labeled according to the Globally Har	monized System (GHS).
Hazard pictograms GHS07 Signal word Warning	
Signal word Warning Hazard statements	
Harmful if swallowed or if inhaled.	
Causes skin irritation.	
Causes serious eye irritation.	
May cause respiratory irritation.	
Precautionary statements	
Avoid breathing dust/fume/gas/mist/vapors/spray	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Use only outdoors or in a well-ventilated area.	
Wear protective gloves / eye protection / face protection.	
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.	

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If in eves: R	(Contd. of page 1) inse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rin	
	tment (see on this label).
Rinse mouth.	
	tion occurs: Get medical advice/attention.
•	
<i>v v</i>	ion persists: Get medical advice/attention.
	taminated clothing and wash it before reuse.
	ell-ventilated place. Keep container tightly closed.
Store locked	
	ontents/container in accordance with local/regional/national/international regulations.
· Classificatio	•
• NFPA rating	gs (scale 0 - 4)
100	Health = 1 Fire = 0 Reactivity = 0
· HMIS-ratin	gs (scale 0 - 4)
HEALTH1FIRECREACTIVITYC	
· Other hazard	ds
Results of P	BT and vPvB assessment
•	assessment not available.
$\cdot vPvB: vPvB$	- assessment not available.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

70775-75-6 Octenidin Dihydrochloride

4 First-aid measures

- · Description of first aid measures
- General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · 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 the mouth and call a 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:

 CO_{2} extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- \cdot Special hazards arising from the substance or mixture
- In case of fire formation of toxic vapours and gases is possible.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation Avoid formation of dust. Avoid contact with the eyes and skin.
 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
 Methods and material for containment and cleaning up:
- Pick up mechanically.
- Dispose contaminated material as waste according to item 13.
- **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

- · Handling:
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.
- · 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: Store only in the original receptacle.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:
- Protect from exposure to the light. Keep receptacle tightly sealed and store in dry conditions.
- 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: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · 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:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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· Protection of hands:

Protective gloves

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.

· 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

9 Physical and chemical properties · Information on basic physical and chemical properties · General Information · Appearance: Form: Crystalline powder Color: White **Odorless** · Odor: · Odor threshold: Not determined. · pH-value: Not determined. · Change in condition 215 °C (419 °F) Melting point/Melting range: **Boiling point/Boiling range:** Undetermined. · Flash point: Not applicable. · Flammability (solid, gaseous): Not applicable. · Ignition temperature: **Decomposition temperature:** Not determined. Not determined. · Auto igniting: · Danger of explosion: Product does not present an explosion hazard. · Explosion limits: Lower: Not determined. Not determined. Upper: Not determined. · Vapor pressure: Not determined. · Density: · Relative density Not determined. · Vapor density Not determined. Not applicable. · Evaporation rate · Solubility in / Miscibility with Water: Insoluble. (Contd. on page 5)

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		(Contd. of page 4)
• organic solvents:	soluble in methanol	
· Partition coefficient (n-octan	o l/water): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
• Other information	No further relevant information available.	

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 further relevant informations available.
- Conditions to avoid exposure to the light high ttemperatures
- Incompatible materials: Avoid contact with: Oxidizers
- metals
- · Hazardous decomposition products: In case of fire: See Section 5

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:
- Oral LD50 800 mg/kg (rat)
- · Primary irritant effect:
- \cdot on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not 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.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- General notes: Water hazard class 3 (Self-asse
 - Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities. • Results of PBT and vPvB assessment

- *PBT*: Not applicable.
- · **vPvB:** Not applicable.

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• Other adverse effects No further relevant information available.

13 Disposal considerations

\cdot Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

- · Uncleaned packagings:
- · Recommendation:

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

Transport information	
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Void
Transport hazard class(es)	
DOT, ADN	
Class	Void
ADR, IMDG, IATA	
· Class	Void
Label	-
Packing group	
DOT, ADR, IMDG, IATA	Void
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex 1	II of
MARPOL73/78 and the IBC Code	Not applicable.
· UN ''Model Regulation'':	Void

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

- Section 355 (extremely hazardous substances): Substance is not listed.
- Section 313 (Specific toxic chemical listings): Substance is not listed.
- TSCA (Toxic Substances Control Act): Substance is not listed.
- · Proposition 65 Substance is not listed.
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Cancerogenity categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.

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	(Contd. of page 6)
· GHS label elements	
The substance is classified and labeled according to the Globally Harmonized System (GHS).
· Hazard pictograms GHS07	
· Signal word Warning	
· Hazard statements	
Harmful if swallowed or if inhaled.	
Causes skin irritation.	
Causes serious eye irritation.	
May cause respiratory irritation.	
· Precautionary statements	
Avoid breathing dust/fume/gas/mist/vapors/spray	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Use only outdoors or in a well-ventilated area.	
Wear protective gloves / eye protection / face protection.	
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.	
<i>IF ON SKIN: Wash with plenty of water.</i>	
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 presen	nt and easy to do
Continue rinsing.	ii unu eusy io uo.
Specific treatment (see on this label). Rinse mouth.	
If skin irritation occurs: Get medical advice/attention.	
If eye irritation persists: Get medical advice/attention.	
Take off contaminated clothing and wash it before reuse.	
Store in a well-ventilated place. Keep container tightly closed.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international regu	ilations.
• Chemical safety assessment: A Chemical Safety Assessment has not been carried out.	
6 Other information	
This information is based on our present knowledge. However, this shall not constitute a g	uarantee 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 05/03/2018 / 4	
· Abbreviations and acronyms:	
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	
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concern	ing the International
Carriage of Dangerous Goods by Road)	
IMDG: International Maritime Code for Dangerous Goods	
IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association	

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 • * **Data compared to the previous version altered.** (Contd. of page 7)

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