

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.11.2011

Version number 1

Revision: 01.08.2008

## 1 Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

· **Trade name:** bis(2-ethylhexyl)hydrogenphosphate

· **Synonyma**

HDEHP

Diisooctyl phosphate

· **Article number:** 15086

· **CAS Number:**

298-07-7

· **EC number:**

2060564

· **1.2. Relevant identified uses of the substance or mixture and uses advised against**

· **Application of the substance / the preparation** Laboratory chemicals

· **1.3. 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

· **1.4. Emergency telephone number:** +49 6131 19240 (university hospital Mainz)

**SERVA**  
Electrophoresis

## 2 Hazards identification

· **2.1. Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

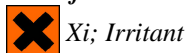


GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R36/38: Irritating to eyes and skin.

· **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

· **2.2. Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms** GHS07

· **Signal word** Warning

· **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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- P332+P313      *If skin irritation occurs: Get medical advice/attention.*
- P337+P313      *If eye irritation persists: Get medical advice/attention.*
- **2.3. Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **3.1. Chemical characterization: Substances**
- **CAS No. Description:**  
298-07-7 bis(2-ethylhexyl) hydrogen phosphate
- **Identification number(s):**
- **EC number:** 2060564

### 4 First aid measures

- **4.1. Description of first aid measures**
- **After inhalation** *In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact**  
*Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.*
- **After swallowing** *If symptoms persist consult doctor.*
- **Information for doctor**
- **4.2. Most important symptoms and effects, both acute and delayed**  
*No further relevant information available.*
- **4.3. Indication of any immediate medical attention and special treatment needed**  
*No further relevant information available.*

### 5 Firefighting measures

- **5.1. Extinguishing media**
- **Suitable extinguishing agents** *Use fire fighting measures that suit the environment.*
- **5.2. Special hazards arising from the substance or mixture** *No further relevant information available.*
- **5.3. Advice for firefighters**
- **Protective equipment:** *No special measures required.*

### 6 Accidental release measures

- **6.1. Personal precautions, protective equipment and emergency procedures** *Not required.*
- **6.2. Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
- **6.3. Methods and material for containment and cleaning up:**  
*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*
- **6.4. Reference to other sections**  
*See Section 8 for information on personal protection equipment.*  
*See Section 13 for disposal information.*

### 7 Handling and storage

- **Handling**
- **7.1. Precautions for safe handling** *No special precautions are necessary if used correctly.*
- **Information about protection against explosions and fires:** *No special measures required.*

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- 7.2. **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.
- 7.3. **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.
- **8.1. 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.
- **8.2. Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
Short term filter device:  
Filter P2.
- **Protection of hands:**  
Protective gloves.  
Neoprene gloves
- **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.
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**  
Natural rubber, NR
- **Eye protection:** Safety glasses

## 9 Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### General Information

#### Appearance:

Form:	Liquid
Colour:	Yellowish
Odour:	Characteristic

#### Change in condition

Melting point/Melting range:	-60°C
Boiling point/Boiling range:	127°C

· **Flash point:** > 110°C

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 0.97 g/cm<sup>3</sup>

#### Solubility in / Miscibility with

Water at 20°C: 18 g/l

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· **9.2. Other information** No further relevant information available.

### 10 Stability and reactivity

- **10.1. Reactivity**
- **10.2. Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3. Possibility of hazardous reactions** No dangerous reactions known
- **10.4. Conditions to avoid** No further relevant information available.
- **10.5. Incompatible materials:** No further relevant information available.
- **10.6. Hazardous decomposition products:** No dangerous decomposition products known

### 11 Toxicological information

- **11.1. Information on toxicological effects**
- **Acute toxicity:**

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

Oral	LD50	4940 mg/kg (rat)
Dermal	LD50	1250 mg/kg (rbt)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

### 12 Ecological information

- **12.1. Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2. Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **12.3. Bioaccumulative potential** No further relevant information available.
- **12.4. Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5. Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.
- **12.6. Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **13.1. Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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### 14 Transport information

· 14.1. UN-Number · ADR, IMDG, IATA	1902
· 14.2. UN proper shipping name · IMDG, IATA	DIISOCTYL ACID PHOSPHATE
· 14.3. Transport hazard class(es) · ADR	
	
· Class · Label	8 Corrosive substances. 8
· IMDG, IATA	
	
· Class · Label	8 Corrosive substances. 8
· 14.4. Packing group · ADR, IMDG, IATA	III
· 14.6. Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Corrosive substances. 80 F-A,S-B
· 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN1902, DIISOCTYL ACID PHOSPHATE, 8, III

### 15 Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations
- Water hazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.
- 15.2. 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 MSDS:

Safety Department

Carl-Benz-Str. 7

D-69115 Heidelberg

· Contact: +49 6221 13840-35

· 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

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

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*ICAO: International Civil Aviation Organization*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

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

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

· **\* Data compared to the previous version altered.**

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