

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 1407099 DPD Free Chlorine Reagent

Print date: 14.06.2013

Product code: 1407099

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

##### 1.1. Product identifier

1407099 DPD Free Chlorine Reagent

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

###### Use of the substance/mixture

Water analysis

##### 1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH  
Street: Willstätterstr. 11  
Place: D-40549 Düsseldorf  
Telephone: +49 (0)211 5288-383  
e-mail: SDS@hach-lange.de  
Internet: www.hach-lange.com  
Responsible Department: HACH LANGE Ltd.  
Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487  
e-Mail: info@hach-lange.co.uk

HACH LANGE Ltd.  
Unit 1, Chestnut Road Western Industrial Estate  
IRL-Dublin 12  
Tel. +353 (0)1 4602522  
e-Mail: info@hach-lange.ie

##### 1.4. Emergency telephone number:

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

This mixture is not classified as dangerous according to Directive 1999/45/EC.

The product does not need to be labelled in accordance with EC directives or respective national laws.

##### 2.2. Label elements

###### Additional advice on labelling

Classification according to European directive on classification of hazardous preparations 1999/45/EC.

##### 2.3. Other hazards

This information is not available.

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

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#### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
-	Carboxylate salt (confidential)	55-65 %
-		
231-448-7	di-Sodium hydrogen phosphate	30-40 %
7558-79-4		
	Skin Irrit. 2, Eye Irrit. 2; H315 H319	
439-010-9	DPD (N,N Diethylphenylendiamine-compound)	1-5 %
	Xn - Harmful, Xi - Irritant R22-36-52-53	
	Acute Tox. 4, Eye Irrit. 2, Aquatic Chronic 3; H302 H319 H412	
205-358-3	Ethylenedinitrilotetraacetic acid disodium salt dihydrate	1-10 %
6381-92-6	Xn - Harmful, Xi - Irritant R22-36/37/38	
	Eye Irrit. 2; H319	

Full text of R and H phrases: see Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Take off all contaminated clothing immediately.

#### After inhalation

Move to fresh air.

#### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.  
If skin irritation persists, call a physician.

#### After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### After ingestion

Clean mouth with water and drink afterwards plenty of water.  
Never give anything by mouth to an unconscious person.

### 4.2. Most important symptoms and effects, both acute and delayed

May cause eye and skin irritation.  
May produce an allergic reaction.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

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**Unsuitable extinguishing media**

No Limit

**5.2. Special hazards arising from the substance or mixture**

Fire may liberate hazardous vapours.

In the event of fire the following can be released: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

In the event of fire, wear self-contained breathing apparatus.

**Additional information**

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment.

Only qualified personnel equipped with suitable protective equipment may intervene.

Immediately evacuate personnel to safe areas.

Do not breathe vapours, mist or gas.

Ensure adequate ventilation.

**6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

**6.3. Methods and material for containment and cleaning up**

Sweep up or vacuum up spillage and collect in suitable container for disposal.

Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

**6.4. Reference to other sections**

13. Disposal considerations

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Use only in well-ventilated areas.

Do not breathe vapours/dust.

**Advice on protection against fire and explosion**

None known.

See also section 5

**Further information on handling**

Observe label precautions.

**7.2. Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Keep in a dry, cool place.

Storage temperature: 10-25 °C

Keep containers dry and tightly closed to avoid moisture absorption and contamination.

**Advice on storage compatibility**

None known.

**7.3. Specific end use(s)**

Laboratory chemicals

Reagent for analysis

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**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Additional advice on limit values**

None known.

**8.2. Exposure controls**

**Appropriate engineering controls**

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Handle in accordance with good industrial hygiene and safety practice.

**Protective and hygiene measures**

Wash hands before breaks and after work.

General industrial hygiene practice.

**Eye/face protection**

Safety glasses with side-shields

**Hand protection**

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

**Skin protection**

Avoid contact with skin and eyes.

Remove and wash contaminated clothing before re-use.

**Respiratory protection**

Avoid breathing dust or vapour.

Provide adequate ventilation.

**SECTION 9: Physical and chemical properties**

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

Physical state: powder  
 Colour: white , light pink  
 Odour: odourless

**Test method**

pH-Value (at 20 °C): 6,35 (1 % solution)

**Changes in the physical state**

Melting point: no data available  
 Boiling point: not applicable  
 Sublimation point: no data available  
 Softening point: no data available  
 Pour point: not applicable  
 : not applicable  
 Flash point: not applicable

**Flammability**

Solid: no data available  
 Gas: no data available

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**Explosive properties**

Not explosive

Lower explosion limits: not applicable

Upper explosion limits: not applicable

Ignition temperature: no data available

**Auto-ignition temperature**

Solid: no data available

Gas: no data available

Decomposition temperature: 110 °C

**Oxidizing properties**

no data available

Vapour pressure: no data available

Vapour pressure: no data available

Density (at 20 °C): 1,76 g/cm<sup>3</sup>

Bulk density: no data available

Water solubility: completely soluble  
(at 20 °C)

**Solubility in other solvents**

no data available

Partition coefficient: not applicable

Viscosity / dynamic: not applicable

Viscosity / kinematic: not applicable

Flow time: not applicable

Vapour density: not applicable

Evaporation rate: not applicable

Solvent separation test: not applicable

Solvent content: not applicable

**9.2. Other information**

Solid content: not applicable

no data available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

Hazardous polymerisation does not occur.

**10.4. Conditions to avoid**

Extremes of temperature and direct sunlight.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

To avoid thermal decomposition, do not overheat.

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Decomposition products: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), Oxides of phosphorus

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicokinetics, metabolism and distribution

Angaben zur Toxikologie liegen nicht vor.

#### Acute toxicity

No data is available on the product itself.

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
	DPD (N,N Diethylphenylendiamine-compound)				
	oral	LD50	970 mg/kg	Ratte	

#### Irritation and corrosivity

May cause eye and skin irritation.

#### Sensitising effects

May produce an allergic reaction.

#### STOT-single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

#### Severe effects after repeated or prolonged exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

#### Aspiration hazard

No aspiration toxicity classification

#### Specific effects in experiment on an animal

No data is available on the product itself.

#### Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

### 12.1. Toxicity

No data is available on the product itself.  
Do not flush into surface water or sanitary sewer system.

### 12.2. Persistence and degradability

No data is available on the product itself.

### 12.3. Bioaccumulative potential

No data is available on the product itself.

### 12.4. Mobility in soil

no data available

### 12.5. Results of PBT and vPvB assessment

no data available

### 12.6. Other adverse effects

no data available

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**Further information**

no data available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Advice on disposal**

In accordance with local and national regulations.

**Waste disposal number of waste from residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

**Waste disposal number of contaminated packaging**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

**Contaminated packaging**

Dispose of as unused product.

The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**Other applicable information (land transport)**

Not subject to transport regulations.

**Inland waterways transport (ADN)**

**Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)**

**Other applicable information (marine transport)**

Not subject to transport regulations.

**Air transport (ICAO)**

**Other applicable information (air transport)**

Not subject to transport regulations.

**14.5. Environmental hazards**

Dangerous for the environment: no

**14.6. Special precautions for user**

no data available

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not relevant

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#### SECTION 15: Regulatory information

##### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

###### EU regulatory information

###### Additional information

The product does not need to be labelled in accordance with EC directives or respective national laws.

###### National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

##### 15.2. Chemical safety assessment

For this mixture a chemical safety assessment has been carried out.

#### SECTION 16: Other information

##### Changes

Revision: 13.06.2013

##### Full text of R phrases referred to under Sections 2 and 3

- |          |   |
|----------|---|
| 22       | Harmful if swallowed.   |
| 36       | Irritating to eyes.   |
| 36/37/38 | Irritating to eyes, respiratory system and skin.                |
| 52       | Harmful to aquatic organisms.                                   |
| 53       | May cause long-term adverse effects in the aquatic environment. |

##### Full text of H statements referred to under Sections 2 and 3

- |      |  |
|------|--|
| H302 | Harmful if swallowed.                              |
| H315 | Causes skin irritation.                            |
| H319 | Causes serious eye irritation.                     |
| H412 | Harmful to aquatic life with long lasting effects. |

##### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*