



## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

## 2105569 DPD Free Chlorine Reagent

Revision date: 05.03.2019 Product code: 2105569 Page 1 of 8

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

#### 1.1. Product identifier

2105569 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.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.
5, Pacific Way

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

<u>1.4. Emergency telephone</u> Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

<u>number:</u> service -

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:
Causes skin irritation.
Causes serious eye irritation.

### 2.2. Label elements

# Regulation (EC) No. 1272/2008

## Hazard components for labelling

Carboxylate salt (confidential) di-Sodium hydrogen phosphate

Ethylenedinitrilotetraacetic acid disodium salt dihydrate

N,N-Diethylphenylendiammonium salt

Signal word: Warning

Pictograms:





## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# 2105569 DPD Free Chlorine Reagent

Revision date: 05.03.2019 Product code: 2105569 Page 2 of 8

#### **Hazard statements**

H315 Causes skin irritation. H319 Causes serious eye irritation.

#### Precautionary statements

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

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

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362 Take off contaminated clothing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

### Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

#### 2.3. Other hazards

This information is not available.

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

#### 3.2. Mixtures

### **Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
-	Carboxylate salt (confidential)	55-60 %		
	-			
7558-79-4	di-Sodium hydrogen phosphate			30-40 %
	231-448-7			
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
confidential	N,N-Diethylphenylendiammonium salt			1-5 %
	439-010-9			
	Acute Tox. 4, Eye Irrit. 2, Aquatic Chronic 3; H302 H319 H412			
6381-92-6	Ethylenedinitrilotetraacetic acid disodium salt dihydrate			1-10 %
	205-358-3			
	Eye Irrit. 2; H319			

Full text of H and EUH statements: 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.





# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# 2105569 DPD Free Chlorine Reagent

Revision date: 05.03.2019 Product code: 2105569 Page 3 of 8

### 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.

#### 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.

### 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 (CO2)

#### 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.

Avoid contact with skin and eyes.

### Advice on protection against fire and explosion

None known.



# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

# 2105569 DPD Free Chlorine Reagent

Revision date: 05.03.2019 Product code: 2105569 Page 4 of 8

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.

#### Hints on joint storage

None known.

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

Laboratory chemicals Reagent for analysis

### **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

pH-Value (at 25 °C): 6,35 (1 % solution)

Changes in the physical state

Melting point: no data available



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

## 2105569 DPD Free Chlorine Reagent

Revision date: 05.03.2019 Product code: 2105569 Page 5 of 8

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

no data available
not applicable
not applicable
not applicable
Flash point:

not applicable

**Flammability** 

Solid: no data available
Gas: no data available

**Explosive properties** 

Not explosive

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

**Auto-ignition temperature** 

Solid: no data available
Gas: no data available
Decomposition temperature: 110 °C

**Oxidizing properties** 

no data available

Vapour pressure:

Vapour pressure:

Density (at 20 °C):

Bulk density:

Water solubility:

(at 20 °C)

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.



# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

# 2105569 DPD Free Chlorine Reagent

Revision date: 05.03.2019 Product code: 2105569 Page 6 of 8

### 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.

Decomposition products: Carbon monoxide, Carbon dioxide (CO2), nitrogen oxides (NOx), Oxides of phosphorus

### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

### Toxicocinetics, metabolism and distribution

Angaben zur Toxikologie liegen nicht vor.

#### **Acute toxicity**

No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7558-79-4	di-Sodium hydrogen phosphate				
	oral	LD50 17000 mg/kg	rat		
confidential	N,N-Diethylphenylendiammonium salt				
	oral	LD50 970 mg/kg	rat		
6381-92-6	Ethylenedinitrilotetraacetic acid disodium salt dihydrate				
	oral	LD50 >2000 mg/kg	rat		

## Irritation and corrosivity

May cause eye and skin irritation.

## Sensitising effects

No known effect.

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

Based on available data, the classification criteria are not met.

### STOT-single exposure

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

### STOT-repeated exposure

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

#### **Aspiration hazard**

No aspiration toxicity classification

#### Specific effects in experiment on an animal

No toxicology information is available.

### **Further information**

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

### **SECTION 12: Ecological information**





# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# 2105569 DPD Free Chlorine Reagent

Revision date: 05.03.2019 Product code: 2105569 Page 7 of 8

#### 12.1. Toxicity

No data is available on the product itself.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
7558-79-4	di-Sodium hydrogen phosphate						
	Acute crustacea toxicity	EC50 mg/l	1089		Daphnia magna (Water flea)		
6381-92-6	Ethylenedinitrilotetraacetic acid disodium salt dihydrate						
	Acute fish toxicity	LC50	320 mg/l		Poecilia reticulata (guppy)	IUCLID	
	Acute algae toxicity	ErC50 mg/l	10-100	72 h			

#### 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

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### Advice on disposal

In accordance with local and national regulations.

Dispose of in accordance with the European Directives on waste and 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)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

# Other applicable information (inland waterways transport)

Not tested

## Marine transport (IMDG)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.



# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

2105569 DPD Free Chlorine Reagent

Revision date: 05.03.2019 Product code: 2105569 Page 8 of 8

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

### **SECTION 15: Regulatory information**

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

### National regulatory information

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

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

# **SECTION 16: Other information**

# Changes

Revision: 05.03.2019

Safety datasheet sections which have been updated: 14

Revision: 02.08.2018

Safety datasheet sections which have been updated: 15, 16

Revision: 10.06.2015

Safety datasheet sections which have been updated: 4, 11

Revision: 21.04.2015

Safety datasheet sections which have been updated: 2, 4, 11

Revision: 25.03.2015

Safety datasheet sections which have been updated: 13

Revision: 13.06.2013

#### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

### Relevant H and EUH statements (number and full text)

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.

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