

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**2105669 DPD Total Chlorine Reagent**

Revision date: 11.07.2018

Product code: 2105669

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

2105669 DPD Total 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

**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****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

N,N-Diethylphenylendiammonium salt

**Signal word:** Warning**Pictograms:**

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**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.  
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)			40-50 %
	-			
7558-79-4	di-Sodium hydrogen phosphate			20-30 %
	231-448-7		01-2119489797-11	
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
7681-11-0	Potassium iodide			20-30 %
	231-659-4			
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
confidential	N,N-Diethylphenylendiammonium salt			1-5 %
	439-010-9		01-0000018360-78	
	Acute Tox. 4, Eye Irrit. 2, Aquatic Chronic 3; H302 H319 H412			

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.

**After contact with eyes**

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

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#### **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 (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.

Avoid contact with skin and eyes.

##### **Advice on protection against fire and explosion**

None known.

See also section 5

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#### 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

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

##### Protective and hygiene measures

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

Wash hands before breaks and after work.

##### 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: &gt;480 min. In splash contact: Glove

material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: &gt; 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.

##### Environmental exposure controls

Should not be released into the environment.

## SECTION 9: Physical and chemical properties

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

Physical state:	powder
Colour:	white
Odour:	odourless
pH-Value (at 20 °C):	6,35 (1 % solution)

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**Changes in the physical state**

Melting point:	145 °C
Initial boiling point and boiling range:	no data available
Sublimation point:	not applicable
Softening point:	no data available
Pour point:	not applicable
:	no data available
Flash point:	not applicable

**Flammability**

Solid:	no data available
Gas:	no data available

**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:	no data available
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**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: (at 20 °C)	completely soluble

**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.

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#### 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.

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 route	Dose	Species	Source	Method
7558-79-4	di-Sodium hydrogen phosphate				
	oral	LD50 mg/kg	17000	rat	
7681-11-0	Potassium iodide				
	oral	LD50 mg/kg	2779	rat	
confidential	N,N-Diethylphenylendiammonium salt				
	oral	LD50 mg/kg	970	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 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

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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.

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	48 h Daphnia magna (Water flea)		
7681-11-0	Potassium iodide					
	Acute fish toxicity	LC50	896 mg/l	96 h Oncorhynchus mykiss (rainbow trout)	EPA	

**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****Disposal recommendations**

In accordance with local and national regulations.

Dispose of in accordance with the European Directives on waste and hazardous waste.

**List of Wastes Code - residues/unused products**

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

**List of Wastes Code - used product**

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

**List of Wastes Code - contaminated packaging**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; 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)**

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**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-TI/IATA-DGR)****Other applicable information (air transport)**

Not subject to transport regulations.

**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 hazard class (D): 3 - strongly hazardous to water

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information****Changes**

Revision: 11.07.2018

Safety datasheet sections which have been updated: 4, 11, 15

Revision: 03.05.2018

Safety datasheet sections which have been updated: 8, 13, 16

Revision: 18.08.2015

Safety datasheet sections which have been updated: 3

Revision: 21.04.2015

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

Revision: 03.12.2013

**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 the present level of our knowledge. It does not, however, give assurance of





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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.)*