

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

#### 1.1. Product identifier

Product form : Substance  
Trade name : SpecKare® DPHP  
EC-No. : 255-490-0  
CAS-No. : 41672-81-5  
Product code : 12009800

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Cosmetic ingredient

##### 1.2.2. Uses advised against

No additional information available

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

Manufactured By : Spec-Chem Industry Inc.  
No.10 Wanshou Road (ShiLin Industrial Park)  
Nanjing 211800, P.R. of China  
Phone Number : 86-25-84523390, 84523391  
Fax Number : 86-25-84520790, 84520791  
Email : sc@specchemind.com  
Only representative : SpecChem GmbH  
Prinzenallee 1, 40549 Düsseldorf, Germany  
Phone Number : +4917673592556

#### 1.4. Emergency telephone number

Emergency number : 112 / 116117 (EU emergency numbers);  
1-800-424-9300/ +1 703-527-3887 (North America, CCN 1010066)

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2 H319  
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning  
Hazard statements (CLP) : H319 - Causes serious eye irritation.  
H412 - Harmful to aquatic life with long lasting effects.  
Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling.  
P273 - Avoid release to the environment.

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
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.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Dipalmitoyl Hydroxyproline	CAS-No.: 41672-81-5 EC-No.: 255-490-0	≤ 100	Eye Irrit. 2, H319 Aquatic Chronic 3, H412

Full text of H- and EUH-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.  
Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.  
Symptoms/effects after eye contact : Eye irritation.  
Symptoms/effects after ingestion : None under normal conditions.

### 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 : Water spray. Dry powder. Foam.  
Unsuitable extinguishing media : Do not use a heavy water stream.

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

- Fire hazard : No fire hazard.  
Explosion hazard : No direct explosion hazard.

### 5.3. Advice for firefighters

- Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

- General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment.

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

- For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.  
Methods for cleaning up : Mechanically recover the product.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.  
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Technical measures : Keep in a cool, well-ventilated place away from heat.  
Storage conditions : Keep away from light. Store tightly closed in a dry, cool and well-ventilated place.  
Packaging materials : Store always product in container of same material as original container.

#### Germany

- Storage class (LGK, TRGS 510) : LGK 13 - Non-combustible solids

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Joint storage table

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for

: LGK 1, LGK 6.2, LGK 7

Joint storage with restrictions permitted for

: LGK 4.1A, LGK 5.1C

Joint storage permitted for

: LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1B, LGK 5.2, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK 10-13

### Switzerland

Storage class (LK)

: LK 11/13 - Solids

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

SpecKare® DPHP (41672-81-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	2.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	17.63 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	1.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.35 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	1.25 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	24 µg/l
PNEC aqua (marine water)	2.4 µg/l
PNEC aqua (intermittent, freshwater)	0.24 mg/l
PNEC aqua (intermittent, marine water)	24 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.156 mg/kg dwt
PNEC sediment (marine water)	15.6 µg/kg dw
PNEC (Soil)	
PNEC soil	17 µg/kg dw

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SpecKare® DPHP (41672-81-5)	
PNEC (Oral)	
PNEC oral (secondary poisoning)	66.67 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing

##### Hand protection:

Protective gloves

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Colour	: White to off-white.
Appearance	: Powder.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: ≈ 69 °C Atm. press.: 1013 hPa
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: ≈ 243.5 °C Atm. press.: 1013 hPa
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available

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pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Insoluble in water, ethanol, and acetone, but can be dispersed in propylene glycol, PEG-400, and paraffin oil. Soluble in polar oils and fats under heating conditions.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 0.0000045 Pa Temp.: 25 °C
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

No additional information available

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

SpecKare® DPHP (41672-81-5)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation	: Not classified
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### SpecKare® DPHP (41672-81-5)

In vivo Skin irritation	New Zealand White rabbit, semiocclusive, not irritating ((OECD 404 method))
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Serious eye damage/irritation : Causes serious eye irritation.

### SpecKare® DPHP (41672-81-5)

In vivo Eye irritation	New Zealand White rabbit, moderately irritating ((OECD 405 method))
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Respiratory or skin sensitisation : Not classified

### SpecKare® DPHP (41672-81-5)

In vivo Skin sensitisation	Dunkin-Hartley Guinea pig, guinea pig maximisation test, not sensitising ((OECD 406 method))
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Germ cell mutagenicity : Not classified

### SpecKare® DPHP (41672-81-5)

In vitro gene mutation study in bacteria	S. typhimurium TA 1535, TA 1537, TA 98 and TA 100 and in Escherichia Coli WP2uvrA-, bacterial reverse mutation assay, Negative ((OECD 471 method))
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In Vitro Mammalian Chromosome Aberration Test	Human peripheral blood lymphocytes, Negative ((OECD 473 method))
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In Vitro Mammalian Cell Gene Mutation Test	mouse lymphoma L5178Y cells, Negative ((OECD 476 method))
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Carcinogenicity : Not classified

Reproductive toxicity : Not classified

### SpecKare® DPHP (41672-81-5)

NOAEL (animal/male, F0/P)	1000 mg/kg bw/day Animal: Wistar rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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NOAEL (animal/male, F1)	1000 mg/kg bw/day Animal: Wistar rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

### SpecKare® DPHP (41672-81-5)

NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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Aspiration hazard : Not classified

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

### SpecKare® DPHP (41672-81-5)

LC50 - Fish [1]	24 mg/l Test organisms (species): Oncorhynchus mykiss, Guideline: OECD Guideline 203 (Fish, Acute Toxicity Test)
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EC50 - Crustacea [1]	≈ 100 mg/l Test organisms (species): Daphnia magna, Guideline: OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
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### SpecKare® DPHP (41672-81-5)

EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Raphidocelis subcapitata, Guideline: OECD Guideline 201 (Alga, Growth Inhibition Test)
Toxicity to microorganisms	activated sludge of a predominantly domestic sewage, static, freshwater, Respiration Inhibition Test, 3 h-EC50> 1,000 mg/L ((OECD 209 method))

### 12.2. Persistence and degradability

#### SpecKare® DPHP (41672-81-5)

Persistence and degradability	Not rapidly degradable
Biodegradation in water	activated sludge, domestic, Manometric Respirometry Test, The degradation rate of LCA07033 reach 74% after 28 days of incubation when nitrification is considered. According to the test guideline OECD 301 F and the analytical parameter, LCA07033 is considered to be readily biodegradable. ((OECD 301F method))

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

#### SpecKare® DPHP (41672-81-5)

Adsorption / desorption	Estimation by HPLC for soil: log Koc<1.25, Estimation by HPLC for sewage sludge: log Koc< 1.46 ((OECD 121 method))
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### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
HP Code	: HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not regulated for transport				



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ADR	IMDG	IATA	ADN	RID
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

##### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

##### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

##### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

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### Dual-Use Regulation (428/2009)

Not listed on the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.1.2. National regulations

#### Germany

- Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).  
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
- Water hazard class (WGK) : Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV).
- Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

#### Netherlands

- ABM category : A(3) - hazardous for aquatic organisms, may have longterm hazardous effects in aquatic environment
- SZW-lijst van kankerverwekkende stoffen : The substance is not listed
- SZW-lijst van mutagene stoffen : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

#### Denmark

- Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

## Safety Data Sheet

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## Abbreviations and acronyms:

IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

## Full text of H- and EUH-statements:

Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.