

PL Phosphorous 2

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

1.1 - Product identifier

Trade name/designation PL Phosphorous 2

Chemical name

Product-type Mixture

Product code PL153-kit, PL154-kit

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

Relevant identified uses - Reagent for water analysis

Uses advised against - Other

1.3 - Details of the supplier of the safety data sheet

Water-I.D. GmbH

Daimlerstr. 20

76344 Eggenstein Germany

Telephone : +49 (0) 721 - 78 20 29 - 0 Fax +49 (0) 721 - 78 20 29 - 11

Website www.water-id.com

EHS / Compliance: lab@water-id.com

1.4 - Emergency telephone number

- Poison Control Center Munich

Tel: +49 (0) 89 / 19 24 0

Germany

24 hour service

Languages: German, English

please also call from: United Kingdom

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

Ox. Sol. 3	Oxidising solids - Category 3
Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Skin Irrit. 2	Irritation, Category 2
Eye Irrit. 2	Eye irritation - Category 2
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Sens. 1	Skin sensitization - Category 1
STOT SE 3 (H335)	STOT-single exposure - Category 3 (H335)
Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3

2.2 - Label elements

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

Contains: dipotassium peroxodisulphate, potassium persulphate (CAS No.: 7727-21-1)

Signal word : Danger

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Hazard pictograms



Hazard statements

H272	May intensify fire; oxidiser
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220	Keep away from clothing and other combustible materials.
P261	Avoid breathing dust.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+P312	If swallowed: Call a POISON CENTER, a doctor if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a a POISON CENTER, a doctor if you feel unwell.
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/.?.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use Carbon dioxide (CO ₂), carbon oxides (CO, CO ₂), dry powder, alcohol-resistant foam, Water spray jet, extinguishing powder for extinction.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents, container to an appropriate recycling or disposal facility.

EUH-phrases

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EUH208	Contains dipotassium peroxodisulphate, potassium persulphate (7727-21-1) . May produce an allergic reaction
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2.3 - Other hazards

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class	Spec. concentrations
dipotassium peroxodisulphate, potassium persulphate	CAS No. : 7727-21-1 Index No. : 016-061-00-1 EC No. : 231-781-8 REACH No. : 01-2119495676-19-XXXX	<= 100	Acute Tox. 4 Oral - H302 Eye Irrit. 2 - H319 Ox. Sol. 3 - H272 Resp. Sens. 1 - H334 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 (H335) - H335	Not applicable

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation

- After inhaling vapours, first symptoms of poisoning may develop hours later, so always consult a doctor.
- Provide fresh air.
- When in doubt or if symptoms are observed, get medical advice.
- Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

Following skin contact

- After contact with skin, wash immediately with plenty of water and soap.
- In case of skin irritation, consult a physician.
- In case of skin reactions, consult a physician.

After eye contact

- Rinse immediately carefully and thoroughly with eye-bath or water.
- In case of eye irritation consult an ophthalmologist.

After ingestion

- Seek medical advice immediately.
- Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.
- Rinse mouth thoroughly with water.
- Medical treatment necessary.
- When in doubt or if symptoms are observed, get medical advice.

4.2 - Most important symptoms and effects, both acute and delayed

Symptoms and effects - Following inhalation

- Symptoms can occur only after several hours.
- Effects Allergic reactions

Symptoms and effects - Following skin contact

- Causes skin irritation.

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Symptoms and effects - After eye contact - Causes eye irritation.

Symptoms and effects - After ingestion - No information available.

4.3 - Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
- Treat symptomatically. Antidotal dispensation.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media

- ABC-powder
- Carbon dioxide (CO₂)
- Foam
- Extinguishing powder

Unsuitable extinguishing media - Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture - No information available.

Hazardous decomposition products - Sulphur oxides

5.3 - Advice for firefighters

- Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
- Do not allow run-off from fire-fighting to enter drains or water courses.
- Remove product from area of fire.
- Wear a self-contained breathing apparatus and chemical protective clothing.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Use personal protection equipment.
- Remove persons to safety.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

For emergency responders - Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.
- Ensure waste is collected and contained.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment

- Soak up inert absorbent and dispose as waste requiring special attention.
- No information available.

Methods and material for cleaning up - Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

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- Take up carefully when dry.
- Clear contaminated areas thoroughly.
- Clean contaminated articles and floor according to the environmental legislation.
- Take up mechanically, placing in appropriate containers for disposal.
- Take up dust-free and set down dust-free.
- Ventilate affected area.

Inappropriate techniques

- No information available.

6.4 - Reference to other sections

- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation

- Avoid: Eye contact
- Avoid: Generation/formation of dust
- It is recommended to design all work processes always so that the following is excluded: Eye contact
- Avoid: Skin contact
- It is recommended to design all work processes always so that the following is excluded: Skin contact
- After use replace the closing cap immediately.
- Avoid exposure - obtain special instructions before use.
- Vapours/aerosols must be exhausted directly at the point of origin.
- All work processes must always be designed so that the following is excluded: Inhalation
- See section 8.

Advices on general occupational hygiene

- Wash contaminated clothing prior to re-use.
- When using do not eat, drink, smoke, sniff.
- Thorough skin-cleansing after handling the product.
- Wash hands before breaks and after work.
- Work in well-ventilated zones or use proper respiratory protection.

7.2 - Conditions for safe storage, including any incompatibilities

- Do not store together with: Food and feedingstuffs
- Keep container tightly closed in a cool, well-ventilated place.
- Do not store together with: Combustible substance

7.3 - Specific end use(s)

- Reagent for water analysis

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

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- No information available.

8.2 - Exposure controls

Appropriate engineering controls

- No information available.

Individual protection measures, such as personal protective equipment

- Suitable protective clothing: lab coat



- Suitable eye protection: Eye glasses with side protection



- Tested protective gloves must be worn



- For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Suitable material: NBR (Nitrile rubber)

- Barrier creams are not substitutes for body protection.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state

Solid

Appearance

crystalline

Colour

White

Odour

odourless

Odour threshold	No data available
pH	3
Melting point	100 °C
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
flammability	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available

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Density	2,477 g/cm ³ @ 20°C
Solubility (Water)	52 g/l
Solubility (Ethanol)	practically insoluble
Solubility (Acetone)	No data available
Solubility (Organic solvents)	No data available
Log KOC	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

9.2 - Other information

VOC content	No data available
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Acute toxicity (oral) - Category 4 - Harmful if swallowed

Toxicity : Mixture

LD50 oral (rat)	RTECS
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available

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LC50 inhalation vapours (rat)	No data available
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- No information available.

Toxicity : Substances

dipotassium peroxodisulphate, potassium persulphate (7727-21-1)

LD50 oral (rat)	802 mg/kg RTECS
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Skin corrosion/irritation - Irritation, Category 2 - Causes skin irritation

- Irritating to skin.

Serious eye damage/eye irritation - Eye irritation - Category 2 - Causes serious eye irritation

- Irritating to eyes.

Respiratory or skin sensitisation - Sensitisation — Respiratory, category 1 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- Skin sensitization - Category 1 - May cause an allergic skin reaction

- May cause sensitization by inhalation.
- May cause sensitization by skin contact.
- May cause an allergic skin reaction.

Germ cell mutagenicity - Not classified

Carcinogenicity - Not classified

Reproductive toxicity - Not classified

STOT-single exposure - STOT-single exposure - Category 3 (H335) - May cause respiratory irritation

- data lacking

STOT-repeated exposure - Not classified

Aspiration hazard - Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	357 mg/l Daphnia magna
LC50 96 hr fish	100 mg/l Poecillia reticulata
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

Toxicity : Substances

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dipotassium peroxodisulphate, potassium persulphate (7727-21-1)

EC50 48 hr crustacea	357 mg/l Daphnia magna
LC50 96 hr fish	100 mg/l Poecillia reticulata

- Harmful to aquatic life with long lasting effects.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- No information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

12.6 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods

- Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
- Handle contaminated packages in the same way as the substance itself.

Sewage disposal

- Do not empty into drains.

Special precautions for waste treatment

- Waste requires special monitoring.
- Collect the waste separately.
- Send to a hazardous waste incinerator facility under observation of official regulations.
- The waste is to be kept separate from other types of waste until its disposal.
- Waste requires monitoring.

Community or national or regional provisions

- Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number

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<u>UN number (ADR)</u>	:	UN1492
<u>UN number (RID)</u>	:	UN1492
<u>UN number (IMDG)</u>	:	UN1492
<u>UN number (IATA)</u>	:	UN1492

14.2 - UN proper shipping name

<u>UN proper shipping name (ADR)</u>	:	POTASSIUM PERSULPHATE
<u>UN proper shipping name (RID)</u>	:	POTASSIUM PERSULPHATE
<u>UN proper shipping name (IMDG)</u>	:	POTASSIUM PERSULPHATE
<u>UN proper shipping name (IATA)</u>	:	POTASSIUM PERSULPHATE

14.3 - Transport hazard class(es)

<u>ADR Transport hazard class(es)</u>	:	5.1
<u>ADR Classification code:</u>	:	O2
<u>Pictograms</u>		



<u>Transport hazard class(es) (RID)</u>	:	5.1
<u>Pictograms</u>		



<u>Transport hazard class(es) (IMDG)</u>	:	5.1
<u>Pictograms</u>		



<u>Transport hazard class(es) (IATA)</u>	:	
<u>Pictograms</u>		



14.4 - Packing group

<u>Packing group</u>	:	III
<u>Packing group (RID)</u>	:	III
<u>Packing group (IMDG)</u>	:	III
<u>Packing group (IATA)</u>	:	

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14.5 - Environmental hazards

Environmental hazards : No
Marine pollutant : No

14.6 - Special precautions for user

ADR

ADR Classification code : O2
ADR Special provisions :
ADR Limited quantity (LQ) : 5 kg
ADR Excepted quantities : E1
ADR Packing instructions : P002 IBC08 LP02 R001
ADR Special packing provisions : B3
ADR Mixed packing provisions : MP10
Instructions for portable tanks and bulk containers : T1
Special provisions for portable tanks and bulk containers : TP33
ADR tank code : SGAV
ADR tanks special provisions : TU3
Vehicle for tank carriage : AT
ADR Transport category : 3
ADR Tunnel restriction code : E
ADR Special provisions loading, unloading and handling : CV24
Special provisions - Packages :
Special provisions - Bulk : VC1 VC2 AP1 AP6 AP7
Special provisions - Operation :
ADR Hazard identification number (Kemler No.) : 50

RID

Special provisions :
Limited quantity (LQ) :
Excepted quantities :

IMDG

Special provisions :
Limited quantity (LQ) : 5 kg
Excepted quantities : E1
Packing instructions :
Special packing provisions :
IBC instruction(s) :
IBC provisions :
Instructions for portable tanks and bulk containers :
Special provisions for portable tanks and bulk containers :
EmS codes : F-A, S-Q
Stowage and handling : A
Segregation :
Properties and observations :

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IATA

<u>PCA - Excepted quantities</u>	:
<u>PCA - Limited Quantity - Packing Instructions</u>	:
<u>PCA - Limited Quantity - Maximum Net Quantity per Package</u>	:
<u>PCA - Packing Instructions</u>	:
<u>PCA - Maximum Net Quantity per Package</u>	:
<u>CAO - Packing Instructions</u>	:
<u>CAO - Maximum Net Quantity per Package</u>	:
<u>Special Provisions</u>	:
<u>ERG Code</u>	:

14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

Substances REACH candidates None

Substances Annex XIV None

Substances Annex XVII None

VOC content No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

SECTION 16: Other information

SDS versions

Version	Issue date	Description of the amendments
1	11.01.2019	MSDS creation

Abbreviations and acronyms - See overview table at www.euphrac.eu

Texts of the regulatory sentences

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3
Eye Irrit. 2	Eye irritation - Category 2
H272	May intensify fire; oxidiser
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects
Ox. Sol. 3	Oxidising solids - Category 3
Resp. Sens. 1	Sensitisation — Respiratory, category 1

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Skin Irrit. 2	Irritation, Category 2
Skin Sens. 1	Skin sensitization - Category 1
STOT SE 3 (H335)	STOT-single exposure - Category 3 (H335)

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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