

1 Identification

Product identifier

Trade name: **Reagent RB**

Synonym: *for total phosphate*

Article number: *CY80TP-RB*

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

No further relevant information available.

Application of the substance / the mixture *Laboratory chemicals*

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Endress+Hauser

Conducta GmbH+Co. KG

Dieselstraße 24

D-70839 Gerlingen

Further information obtainable from:

Phone: +49 (0)7156 209-117

Fax.: +49 (0)7156 209-222

E-Mail: conducta_service@conducta.endress.com

Emergency telephone number: *0061 13 11 26*

* 2 Hazard(s) Identification

Classification of the substance or mixture



flame over circle

Ox. Liq. 2 H272 May intensify fire; oxidiser.



health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Skin Sens. 1 H317 May cause an allergic skin reaction.

Label elements

GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

Hazard pictograms *GHS03, GHS08*

Signal word *Danger*

Hazard-determining components of labelling:

sodium persulphate

Hazard statements

May intensify fire; oxidiser.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from clothing and other combustible materials.

Avoid breathing dust/fume/gas/mist/vapours/spray.

[In case of inadequate ventilation] wear respiratory protection.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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Trade name: Reagent RB

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Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

PBT: Not applicable.





vPvB: Not applicable.

3 Composition and Information on Ingredients

Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

7775-27-1	sodium persulphate  Ox. Sol. 2, H272;  Resp. Sens. 1, H334;  Acute Tox. 4, H302;  Skin Sens. 1, H317	2-6%
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Additional information: For the wording of the listed hazard phrases refer to section 16.

* 4 First Aid Measures

Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire Fighting Measures

Extinguishing media

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: no further information

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

Advice for firefighters

Protective equipment: No special measures required.

* 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures Wear protective clothing.

Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

*** 7 Handling and Storage**

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about fire - and explosion protection: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Storage class: 5.1 B

Specific end use(s) No further relevant information available.

*** 8 Exposure controls and personal protection**

Additional information about design of technical facilities: No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

7775-27-1 sodium persulphate

NES (Australia)	Peak limitation: 0.01 mg/m ³ Sen
WES (Australia)	Peak limitation: 0.01 mg/m ³ Sen

Additional information: The lists valid during the making were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.
Only use chemical-protective gloves with CE-labelling of category III.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
No chemical-protective gloves required.

Material of gloves

Nitrile rubber, NBR

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Natural rubber, NR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: *Goggles recommended during refilling*

Body protection: *Protective work clothing*

9 Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	<i>Liquid</i>
Colour:	<i>Colourless</i>
Odour:	<i>Odourless</i>
Odour threshold:	<i>Not determined.</i>

Important information on protection of health and environment, and on safety.

pH-value at 20 °C: *3.8*

Change in condition

Melting point/freezing point: *Undetermined.*

Initial boiling point and boiling range: *100 °C*

Flash point: *Not applicable.*

Flammability (solid, gas): *Not applicable.*

Decomposition temperature: *Not determined.*

Auto-ignition temperature: *Product is not selfigniting.*

Explosive properties: *Product does not present an explosion hazard.*

Explosion limits:

Lower: *Not determined.*

Upper: *Not determined.*

Vapour pressure at 20 °C: *23 hPa*

Density at 20 °C: *1.004 g/cm³*

Relative density *Not determined.*

Vapour density *Not determined.*

Evaporation rate *Not determined.*

Solubility in / Miscibility with water:

Easily soluble.

Partition coefficient: n-octanol/water: *Not determined.*

Viscosity:

Dynamic: *Not determined.*

Kinematic: *Not determined.*

Solvent content:

Water: *96.0 %*

Solids content: *0.0 %*

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Trade name: Reagent RB

Other information

No further relevant information available.

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10 Stability and Reactivity**Reactivity** No further relevant information available.**Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:** No dangerous decomposition products known.**11 Toxicological Information****Information on toxicological effects****Acute toxicity****LD/LC50 values relevant for classification:****7775-27-1 sodium persulphate**

Oral | LD50 | 920 mg/kg (rat)

Primary irritant effect:**Skin corrosion/irritation** No irritant effect.**Serious eye damage/irritation** No irritating effect.**Respiratory or skin sensitisation**

Sensitisation possible through inhalation.

Sensitisation possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

12 Ecological Information**Toxicity****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behaviour in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Waste treatment methods****Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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Trade name: Reagent RB

(Contd. of page 5)

Uncleaned packaging:

Recommendation: *Disposal must be made according to official regulations.*

Recommended cleansing agents: *Water, if necessary together with cleansing agents.*

*14 Transport information

UN-Number

ADG, IMDG, IATA

UN3216

UN proper shipping name

ADG

UN3216 PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

UN3216 PERSULFATE, ANORGANISCHE, WÄSSERIGE LÖSUNG, N.A.G.

IMDG, IATA

PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

Transport hazard class(es)

ADG



Class

5.1 (O1) Oxidising substances.

Label

5.1

IMDG, IATA



Class

5.1 Oxidising substances.

Label

5.1

Packing group

ADG, IMDG, IATA

III

Environmental hazards:

Not applicable.

Special precautions for user

Warning: Oxidising substances.

Danger code (Kemler):

50

EMS Number:

F-A,S-Q

Stowage Category

A

Segregation Code

SG38 Stow "separated from" ammonium compounds.

SG49 Stow "separated from" cyanides

SG62 Stow "separated from" sulphur

Transport in bulk according to Annex II of

Marpol and the IBC Code

Not applicable.

Transport/Additional information:

ADG

Limited quantities (LQ)

5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

Transport category

3

Tunnel restriction code

E

IMDG

Limited quantities (LQ)

5 kg

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Trade name: Reagent RB

(Contd. of page 6)

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation":

UN 3216 PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S., 5.1, III

***15 Regulatory information**

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

Australian Inventory of Chemical Substances

All ingredients are listed.

Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

Hazard pictograms GHS03, GHS08

Signal word *Danger*

Hazard-determining components of labelling:

sodium persulphate

Hazard statements

*May intensify fire; oxidiser.**May cause allergy or asthma symptoms or breathing difficulties if inhaled.**May cause an allergic skin reaction.*

Precautionary statements

*Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.**Keep away from clothing and other combustible materials.**Avoid breathing dust/fume/gas/mist/vapours/spray.**[In case of inadequate ventilation] wear respiratory protection.**Dispose of contents/container in accordance with local/regional/national/international regulations.*

Directive 2012/18/EU

Named dangerous substances - ANNEX I *None of the ingredients is listed.*Seveso category P8 *OXIDISING LIQUIDS AND SOLIDS*Qualifying quantity (tonnes) for the application of lower-tier requirements *50 t*Qualifying quantity (tonnes) for the application of upper-tier requirements *200 t*

National regulations:

Waterhazard class: *Water hazard class 1 (Self-assessment): slightly hazardous for water.*Chemical safety assessment: *A Chemical Safety Assessment has not been carried out.***16 Other information***This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

Department issuing SDS: PCC-TWRC

Contact: MSDS@conducta.endress.com

Abbreviations and acronyms:

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)**ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative*

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Safety Data Sheet

according to WHS Regulations

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Printing date 06.02.2019

Version number 2

Revision: 06.02.2019

Trade name: Reagent RB

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Ox. Liq. 2: Oxidizing liquids – Category 2

Ox. Sol. 2: Oxidizing solids – Category 2

Acute Tox. 4: Acute toxicity – Category 4

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

*** Data compared to the previous version altered.**

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