Safety Data Sheet

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

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

1.1 Product identifier

SARO Klarspüler PRO 200 (Rinse Aid)

Article N°: 408-2005

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

Relevant identified uses: product to improve the efficiency of rinsing and polishing the dishes, which are

washed by machine. For professional use.

Uses advised against: not determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer: SARO Gastro - Products GmbH

Address: Sandbahn 6; 46446 Emmerich; Germany

Telephone/Fax number: +49-2822-9258-0

E-mail address for a competent person responsible for sds: info@saro.de

1.4 Emergency telephone number

112 or +49 (0) 2822-9258-0 (direct phone number for the manufacturer).

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Irrit. 2 H319

Causes serious eye irritation.

2.2 Label elements

Hazard pictograms and signal words



WARNING

Names of hazardous substances placed on the label

None

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear eye 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.

2.3 Other hazards

The components of this mixture do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

orthophosphoric acid, 75% solution

Concentration range: 5-10%
CAS number: 7664-38-2

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EC number: 231-633-2

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Index number: 015-011-00-6

Registration number: -

Classification: Skin Corr. 1B H314

Substance with occupational exposure limit values established on the Community level.

citric acid

Concentration range: 5-10%
CAS number: 77-92-9
EC number: 201-069-1

Index number:

Registration number: 01-2119457026-42-XXXX

Classification: Eye Irrit. 2 H319

Full text of each relevant H phrase is given in section 16 of SDS.

Section 4: First aid measures

4.1 Description of first aid measures

<u>Skin contact:</u> take off contaminated clothing and shoes. Wash the contaminated skin with plenty of water with soap, rinse thoroughly. Consult a doctor if necessary.

<u>Eye contact:</u> remove contact lenses. Wash the contaminated eyes with plenty of water for 10-15 minutes, rinse with water. Avoid powerful water stream – risk of cornea damage. Consult a doctor if necessary.

<u>Ingestion:</u> do not induce vomiting! Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a doctor, show packaging or label.

<u>Inhalation:</u> move the victim to fresh air. Keep victim warm and calm. Consult a doctor if disturbing symptoms appear.

4.2 Most import ant symptoms and effects, both acute and delayed

Skin contact: redness, burning sensation.

Eye contact: redness, tearing, burning sensation, irritation.

<u>Ingestion</u>: possible throat and esophagus irritation, abdominal pains, diarrhea, vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: adapt the extinguishing media to surrounding materials.

<u>Unsuitable extinguishing media:</u> water jet – risk of the propagation of the flame.

5.2 Special hazards arising from the substance or mixture

During the fire, the product may produce toxic fumes and gases containing carbon oxides, phosphorus oxides. Do not inhale combustion products, they can be dangerous for human health.

5.3 Advice for firefighters

Cool down the containers exposed to fire with water. Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Do not let the extinguishing water contaminate sewers and watercourses.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Use personal protective measures. Ensure that only the trained personnel removes the effects of the accident. In case of large spills, isolate the exposed area. Avoid skin and eyes contamination. Ensure adequate ventilation.

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6.2 Environmental precautions

In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

6.3 Methods and material for containment and cleaning up

Collect the product with absorbing materials (sand, diatomaceous earth, universal binding material) and place it in labeled, tightly closed containers. Treat the collected material as waste. Clean the contaminated area.

6.4 Reference to other sections

Appropriate conduct with waste product – section 13. Personal protective equipment – see section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Avoid contact with skin and eyes. Before break and after work wash hands. Keep the unused container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in an original container in a dry, cool and well-ventilated area. Keep away from food, drink and animal feedingstuffs. Recommended storage temperature: 5-35° C. Keep away from direct sunlight. Keen away from strong alkalis and oxidizing agents.

7.3 Specific end use(s)

No information about other uses than those mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Specification	TWA 8 hour	STEL 15 min
orthophosphoric acid [CAS 7664-38-2]	1 mg/m ³	2 mg/m ³

Legal basis: Commission Directive 2006/15/EC, 2000/39/EC, 2009/161/EC.

The table above shows the maximum workplace concentration values at the Community level.

Please check any national occupational exposure limit values in your country.

Recommended control procedures

Procedures concerning the control over the dangerous components concentrations in the air and control over the air quality in the workplace – if they are available and justified for the position – in accordance with the European Standards, with the conditions within the exposure place and a proper test methodology adapted to the working conditions.

8.2. Exposure controls

Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Before break and after work wash hands carefully. Avoid eye and skin contact.

Hand and body protection

Use impermeable, chemical-resistant gloves. Recommended glove material: nitrile rubber. In case of a short contact, use protective gloves with effectiveness level ≥ 2 (breakthrough time > 30 min.). In case of a prolonged contact, use protective gloves with effectiveness level 6 (breakthrough time > 480 min.).



When using protective gloves during work with chemical products, it should be noted that the efficacy levels and corresponding breakthrough times do not indicate actual times of protection at a particular workplace, because the protection can be affected by many factors, e.g. temperature, other substances etc. If there are any signs of degradation, damage or change in appearance (colour, flexibility, shape), it is recommended to replace the gloves with a new pair. Please follow the manufacturer's instructions, not only in terms of gloves' usage, but also in terms of their cleaning, maintenance and storage. It is also important to know how to take off the gloves in order to avoid hands contamination.



Eyes protection

If there is a risk of eye contact, use tightly fitting protective glasses.

Respiratory protection

Not required if the ventilation is adequate.

Applied personal protective equipment must comply with the requirements of the Directive 89/686/EC. The employer is obliged to provide protective equipment relevant to performed activities and in accordance with all quality requirements, including its maintenance and cleaning.

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Environmental exposure controls

Avoid releases to the environment, prevent from entering drains. Possible emissions from the ventilation systems and processing equipment should be controlled in order to determinate their compatibility with environmental protection regulations.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

physical state: liquid colour: blue

odour: characteristic odour threshold: not determined

pH (20°C): 1,08

melting point/freezing point:
not determined initial boiling point and boiling range:
not determined

flash point: not applicable, product is not flammable

evaporation rate: not determined flammability (solid, gas): not applicable upper/lower flammability or explosive limits: not determined vapour pressure: not determined vapour density: not determined density (20°C): 1,08 g/cm³ solubility(ies): soluble in water partition coefficient: n-octanol/water: not determined auto-ignition temperature: not determined decomposition temperature: not determined explosive properties: not display oxidising properties: not display not determined viscosity:

9.2 Other information

None.

Section 10: Stability and reactivity

10.1 Reactivity

Product is reactive. It does not undergo dangerous polymerisation. See also: subsection 10.3-10.5.

10.2 Chemical stability

The product is stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

The product reacts exothermically with bases. During a reaction with metals, hydrogen is released.

10.4 Conditions to avoid

Avoid direct exposure to sunlight and high temperatures.

10.5 Incompatible materials

Strong oxidizing agents, bases, metal oxides, base metals, compounds based on active chlorine.

10.6 Hazardous decomposition products

Not known.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicity of components

orthophosphoric acid [CAS 7664-38-2]

 LD_{50} (rat, oral) 1 530 mg/kg LD_{50} (Rabbit, dermal) 2 740 mg/kg

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Toxicity of mixture

Acute toxicity

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

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Section 12: Ecological information

12.1 Toxicity

Product is not classified as dangerous for the aquatic environment.

12.2 Persistence and degradability

Not specified.

12.3 Bioaccumulative potential

Bioaccumulation is not expected.

12.4 Mobility in soil

The product is mobile in water and soil.

12.5 Results of PBT and vPvB assessment

Components of the mixture do not meet the criteria of PBT or vPvB.

12.6 Other adverse effects

The mixture is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (e.g., endocrine disrupting potential, global warming potential).

Section 13: Disposal considerations

13.1 Waste treatment methods

<u>Disposal methods for the product:</u> disposal in accordance with the local legislation. Do not nix with other waste. Waste code should be given in the place of its formation.

<u>Disposal methods for used packing:</u> reuse/recycle/eliminate empty containers in accordance with the legislation in force. Only containers completely empty can be recycled.

Legal basis: Directive 2008/98/EC, 94/62/EC.

Section 14: Transport information

14.1 UN number

Not applicable. Product is not classified as dangerous during transport.

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14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not apllicable.

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

Not applicable.

Section 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.

Commission Regulation (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.

Commission Regulation (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for mixtures.

Section 16: Other information

Full text of indicated H phrases mentioned in section 3

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

Clarification of aberrations and acronyms

Eye Irrit 2 Eye irritation category 2 Skin Corr. 1B Skin corrosion category 1B

PBT Persistent, Bioaccumulative and Toxic substance vPvB very Persistent, very Bioaccumulative substance

<u>Trainings</u>

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Further information

Classification was based on data on hazardous substances content established by calculation method under the guidance of Regulation 1272/2008/EC (CLP) as amended.

Other data

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Safety Data Sheet

Composed by: mgr Monika Gotowalska (on the basis of producer's data). Safety Data Sheet made by: "THETA" Doradztwo Techniczne

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field