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

1.1 **Product identifier THIO-CLEAR ECO**

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

Relevant identified uses: washing aid for photographic use. not determined. Uses advised against:

1.3 Details of the supplier of the safety data sheet

Manufacturer: **Adox Fotowerke GmbH** Address:

Pieskower Str. 30A, 15526 Bad Saarow, Germany

Telephone/fax: 033631/645927

E-mail address for a competent person responsible for SDS: info@adox.de

1.4 **Emergency telephone number**

112

Hazards identification Section 2:

Classification of the substance or mixture 2.1

Product is not classified as hazardous for human health and for the environment.

2.2 Label elements

Hazard pictograms and signal words

None.

Hazard statements

None.

Precautionary statements

None.

Additional information

EUH210 Safety data sheet available on request.

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

Index number: - REACH number: -	CAS: 584-08-7 EC: 209-529-3 Index number: -	<u>potassium carbonate</u> Skin Irrit. 2 H315, Eye Irrit. 2 H319, STOT SE 3 H335	3-6 %
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Full text of each relevant H phrase is given in section 16 of SDS.

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Section 4: First aid measures

4.1 Description of first aid measures

<u>Skin contact</u>: consult a doctor if disturbing symptoms appear. Take off contaminated clothing. Wash the contaminated skin thoroughly with plenty of water with soap.

<u>Eye contact</u>: consult a doctor if disturbing symptoms appear. Protect the non-irritated eye, remove contact lenses. Wash the contaminated eyes with plenty of water for 10-15 minutes. Avoid powerful water stream – risk of cornea damage.

<u>Ingestion</u>: consult a doctor if disturbing symptoms appear. Rinse mouth with water, give plenty of water to drink. Never give anything by mouth to an unconscious person.

Inhalation: consult a doctor if disturbing symptoms appear. Move the victim to fresh air. Keep victim warm and calm.

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

Skin contact: long contact may cause redness, skin dryness.

Eye contact: possible redness, tearing, burning sensation, blurred vision.

Ingestion: possible stomach pain, nausea, vomiting.

Inhalation: high concentration of vapours and mists may cause respiratory tract irritation.

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

<u>Suitable extinguishing media</u>: 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 of carbon oxides or other unidentified thermal decomposition products. Do not inhale combustion products, they can be dangerous for human health.

5.3 Advice for firefighters

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. Cool the endangered containers with water spray from a safe distance. Collect used extinguishing media.

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. Ensure that only the trained personnel removes the effects of the accident. In case of large spills, isolate the exposed area. Use personal protective measures. 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

<u>Large leakage</u>: isolate places where liquid accumulates; pump the collected liquid out of contaminated area. <u>Small leakage</u>: collect with liquid absorbing materials (e.g. soil, sand, silica, universal binding agent, vermiculite, etc.) and place it in labeled containers. Treat the collected material as waste. Clean the contaminated place and ventilate it.

6.4 Reference to other sections

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

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. Use only in accordance with the identified purpose. Ensure adequate ventilation of area, where the product is used. Use personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in tightly closed, original containers in a dry, cool and well-ventilated area. Keep away from food, beverages or animal feed. Avoid direct exposure to sunlight. Do not store with incompatible materials (see subsection 10.5).

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

No occupational exposure limit values were established for the components of the mixture. Legal basis: Commission Directive 2006/15/EC, 2000/39/EC, 2009/161/EC, 2017/164/EU. Please check any national occupational exposure limit values in your country.

8.2 Exposure controls

Use the product in accordance with good occupational hygiene and safety practices. Ensure adequate ventilation of the area where the product is used and stored. Before break and after work wash hands carefully. Do not eat, drink or smoke when using the product. Take off contaminated clothing and wash it before next use. Hand and body protection

Use protective gloves resistant to the product. Material for gloves choose individually at the worplace. In case of a short contact, use protective gloves with effectiveness level \geq 2 (breakthrough time > 30 min.). In case of a prolonged contact, use protective gloves with effectiveness level = 6 (breakthrough time > 480 min.). Wear protective clothing.

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.

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Eyes protection

Not required under normal conditions of work. Use safety glasses if there is a risk of eye contamination.

Respiratory protection

Use respiratory protection in case of insufficient ventilation.

Applied personal protective equipment must comply with the requirements of the Regulation (EU) 2016/425. The choice of personal protective equipment should be made taking into account the concentration and form of the substance in the workplace, the routes of exposure, the time of exposure and activities performed by the employee. The employer is obliged to provide protective equipment relevant to performed activities and in accordance with all quality requirements, including its maintenance and cleaning.

Environmental exposure controls

Do not allow large quantities of the product to contaminate ground water, drains, sewages or soil. 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: colour:	liquid light yellow
odour:	odourless
odour threshold:	not applicable
рН (20 °С):	12,9
melting point/freezing point:	not determined
initial boiling point and boiling range:	not determined
flash point:	not determined
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:	1,042 g/cm ³
solubility(ies):	not determined
partition coefficient: n-octanol/water:	not determined
auto-ignition temperature:	not determined
decomposition temperature:	not determined
explosive properties:	not display
oxidising properties:	not display
viscosity:	not determined
Other information	

9.2 Other information

There are no additional test results.

Section 10: Stability and reactivity

10.1 Reactivity

Product is feebly reactive. Product does not undergo a dangerous polymerization. See also subsections 10.3-10.5.

10.2 Chemical stability

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

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10.3 Possibility of hazardous reactions

Hazardous reactions are not known.

10.4 Conditions to avoid

Avoid heat sources and direct exposure to sunlight.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Not known.

Section 11: Toxicological information

11.1 Information on toxicological effects

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

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

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

Toxicity of components

potassium carbonate [CAS 584-08-7] Toxicity for invertebrates EC₅₀ (Daphnia magna) 200 mg/l/48 h

Toxicity of mixture

Product is not classified as dangerous for the environment. However, due to the high pH of the substance, releasing it to the environment can have negative effects on living organisms.

12.2 Persistence and degradability

No specific data for the product.

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12.3 Bioaccumulative potential

No specific data for the product.

12.4 Mobility in soil

Mobility of components of the mixture in soil depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms.

12.5 Results of PBT and vPvB assessment

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

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. Store residues in original containers. Recycle, if possible. Waste code should be given in the place of waste formation.

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

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

Section 14: Transport information

14.1 UN number

Not applicable. Product is not classified as dangerous during transport (by land, by sea or by air).

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 applicable.

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

Not applicable.

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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 (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 as amended.

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

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

Regulation (EU) No 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for mixtures.

	Section 16: Other information
Full text of indicate	ed H phrases mentioned in section 3
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Clarification of abe	rrations and acronyms
PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance.
Eye Irrit. 2	Eye irritation category 2
Skin Irrit. 2	Skin irritation category 2
STOT SE 3	Specific target organ toxicity — single exposure category 3

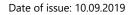
<u>Trainings</u>

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.

Key literature references and sources of data

This SDS was prepared on the basis of sheets of the individual components, literature data, online databases (eg. ECHA, TOXNET, COSING) as well as our knowledge and experience, taking into account current legislation.

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Procedures used to classify the mixture according to Regulation EC 1272/2008

Classification was based on test results and data on the content of hazardous substances and prepared using calculation method under the guidance of Regulation 1272/2008/EC (CLP) as amended.

<u>Other data</u>

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.