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

· 1.1 Product identifier

· Trade name: Antichlor pearl form

· Chemical Identification: sodium thiosulfate

· Article number: 16 · CAS Number: 10102-17-7 · EC number:

231-867-5

• **Registration number** 01-2119531537-38

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

No further relevant information available.

· Application of the substance / the mixture

Basic material with not specifically defined use.

Reducing agent/ Deoxidiser

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Möller Chemie GmbH & Co. KG

Bürgerkamp 1 D-48565 Steinfurt Tel.: 02551/9340-0 Fax: 02551/9340-60

- · Further information obtainable from: Product safety department
- · 1.4 Emergency telephone number:

Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The substance is not classified, according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

- · Results of PBT and vPvB assessment
- · PRT:

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition/information on ingredients

- · 3.1 Substances Sodium thiosulfate pentahydrate Na2S2O3*5 H2O
- · CAS No. Description

10102-17-7 Sodium Thiosulfate Pentahydrate

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· Identification number(s) · EC number: 231-867-5

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air.

In case of irritation of the respiratory tract, consult a doctor.

- · After skin contact: Wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Sulphur dioxide (SO2)

Sodium Oxide (Na2O)

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Avoid formation of dust.

Do not breathe dust.

· 6.2 Environmental precautions:

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

Damp down dust with water spray.

· 6.3 Methods and material for containment and cleaning up:

Pick up mechanically and rinse off residues with water. Avoid dust formation. Collect in suitable containers and send for recovery or disposal according to point 13.

· 6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

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When dissolving, always add water and stir in the product.

- · Information about fire and explosion protection: Keep ignition sources away Do not smoke.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in well closed containers, cool and dry.
- · Information about storage in one common storage facility:

Store away from oxidising agents.

Do not store together with acids.

· Further information about storage conditions:

None

Store in a dry, cool and well-ventilated place.

Protect from heat and direct sunlight.

Recommended storage temperature: < 40°C

- · Storage class: 13
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · DNELs

worker:

Long-term - systemic effects, inhalative: 374 mg/m³

Consumer:

Long-term - systemic effects, inhalative: 110 mg/m³ Long-term - systemic effects, oral: 14 mg/kg bw/day

· PNECs

Fresh water 0.8 mg/l

sea water 0.08 mg/l

Sewage treatment plant (STP) 102.6 mg/l

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Do not breathe dust. Avoid dust formation.

· Respiratory protection:

In dust formation respiratory protection required.

Filter P2

· Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

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.

natural latex Acrylonitrile Butadiene Rubber

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.

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Safety data sheet according to 1907/2006/EC, Article 31

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· Eye/face protection

Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

Colour: White
Odour: Odourless
Odour threshold: Not determined.

· Melting point/freezing point: 48 °C

· Boiling point or initial boiling point and boiling

range not determined

· Flammability Product is not flammable.

· Lower and upper explosion limit

· Lower: Not determined. · Upper: Not determined.

• Flash point: Not applicable; Product is not flammable or explosive.

Decomposition temperature: > 100 °C
 pH (100 g/l) at 20 °C
 6.5-9.5

· Viscosity:

Kinematic viscosityDynamic:Not applicable.Not applicable.

· Solubility · water at 25 °C:

764 g/l

• Partition coefficient n-octanol/water (log value)
• Vapour pressure:

• Not applicable.

Not applicable.

· Density and/or relative density

Density at 20 °C:
 Relative density
 Vapour density
 Particle characteristics
 1.68 g/cm³
 Not determined.
 Not applicable.
 See item 3.

• 9.2 Other information No further relevant information available.

· Appearance:

· Form: Solid · Important information on protection of health and

environment, and on safety.

· Auto-ignition temperature: Not determined.

Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Change in condition

· Evaporation rate Not applicable.

· Information with regard to physical hazard classes

Void · Explosives Void · Flammable gases Void · Aerosols · Oxidising gases Void · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void

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· Pyrophoric liquids	Void
· Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable	
gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.3 Possibility of hazardous reactions High temperatures (>100 °C): Spontaneous decomposition.
- · 10.4 Conditions to avoid

Heat, flames and sparks.

Water, moisture.

· 10.5 Incompatible materials:

Strong oxidizing agents

Acids.

halogens

Nitrites, nitrates.

peroxides

· 10.6 Hazardous decomposition products:

Sulphur dioxide

Sodium Oxide (Na2O)

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

LD50,oral >5,000 mg/kg rat OECD Guideline 401 ECHA

LC50, inhalative: dust/mist >5.5 mg/l/4h rat OECD Guideline 403 ECHA

LD50,dermal >2,000 mg/kg rabbit OECD Guideline 402 ECHA

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Low irritation possible not required for identification.
- · 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.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

(Acute) aquatic toxicity

EC50/48h: 230 mg/l Daphnia magna ECHA

 $EC50/72h > 100 \ mg/l \ Algae \ (Pseudokirchneriella \ subcapitata) \ OECD \ Guideline \ 201 \ ECHA$

(Chronic) aquatic toxicity

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NOEC ≥316 mg/l zebrafish (Danio rerio) OECD Guideline 210 ECHA 34 d

NOEC > 10 mg/l Daphnia magna OECD Guideline 211 ECHA 21 d

NOEC ≥100 mg/l Algae (Pseudokirchneriella subcapitata) OECD Guideline 201 ECHA 72 h

- · 12.2 Persistence and degradability Not applicable for inorganic substances
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
- · vPvB: This substance is not considered to be very persistent nor very bioaccumulative (vPvB).
- 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · 12.7 Other adverse effects No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Disposal according to local regulations.

Do not empty into drains.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14.1 UN number or ID number ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
14.4 Packing group ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Maritime transport in bulk according instruments	g to IMO Not applicable.	
· UN "Model Regulation":	Void	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.

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· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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: Product safety department
- · Contact: Mrs. Steyer
- · 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)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

– EU