

Product name:	OP-S NONDRY	Page:	1/8
Revision date:	2018-12-04	Print date:	2018-12-04
Document No.:	M0185	SDS-ID:	SG-EN/8.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier	
Product name:	OP-S NONDRY
	Batch No. ≤8183-01 Cat. No. 40700064, 40700065
Container size:	1; 5
1.2. Relevant identified uses	of the substance or mixture and uses advised against
Application:	Polishing agent for materialographic specimen preparation.
1.3. Details of the supplier of	the safety data sheet
<u>Supplier:</u>	Struers ApS, Singapore Branch 627A Aljunied Road #07-08 BizTech Centre 389842 Singapore Tel:+65 6299 2268
Responsible for safety data sheet authoring:	Responsible for safety data sheet authoring: DHI Any questions to the contents of this safety data sheet should be sent to: struers@struers.dk
1.4. Emergency telephone nu	mber

24-hour Emergency Medical Service (EMS): 995.

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS:

STOT repeated Cat 2

2.2. Label elements



	Warning
H373K	May cause damage to organs (kidneys) through prolonged or repeated exposure.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container in accordance with local regulations.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
2.3. Other hazards	

Contains A mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

<u>PBT/vPvB:</u> No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

The product contains: Silica and water.

GHS:

<u>%:</u>	CAS-No.:	<u>EC No.:</u>	<u>REACH Reg.</u> <u>No:</u>	<u>Chemical name:</u>	Hazard classification:	<u>Notes:</u>
<25	107-21-1	203-473-3	-	Ethanediol	Acute oral toxicity Cat 4 STOT repeated Cat 2	
<0.0015	55965-84-9		-	A mixture of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	Acute inhalation toxicity Cat 3 Acute dermal toxicity Cat 3 Acute oral toxicity Cat 3 Skin corrosion/irritation Cat 1B Skin sensitizer Cat 1 Aquatic, Acute Cat 1 Aquatic, Chronic Cat 1	

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures			
Inhalation:	Move into fresh air and keep at rest.		
Skin contact:	Remove contaminated clothes and rinse skin thoroughly with water.		
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.		
Ingestion:	Immediately rinse mouth and drink plenty of water. Keep person under observation. If uncomfortable: Seek hospital and bring along these instructions. Do not induce vomiting.		
4.2. Most important symptoms and effects, both acute and delayed			
Symptoms/effects:	See section 11 for more detailed information on health effects and symptoms.		
4.3. Indication of any immediate medical attention and special treatment needed			

<u>Medical attention/treatments:</u> Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.				
	Unsuitable extinguishing media: No specific precautions.				
5.2. Special hazards arising from	om the substance or mixture				
Specific hazards:	In case of fire, toxic gases may be formed.				
5.3. Advice for firefighters					
Protective equipment for fire- fighters:	Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.				

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures				
Protective equipment:	Avoid contact with skin and eyes. For personal protection, see section 8. $(*)$			
Emergency procedures:	No specific recommendations. For personal protection, see section 8. (*)			
6.2. Environmental precaution	n <u>s</u>			
Environmental precautions:	Avoid discharge into water courses or onto the ground.			
6.3. Methods and material for containment and cleaning up				
Methods for cleaning up:	Dam and absorb spillage with sand, sawdust or other absorbent.			
6.4. Reference to other sections				

<u>Reference:</u> For personal protection, see section 8. For waste disposal, see section 13.

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SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling				
Safe handling advice:	Avoid contact with skin and eyes. Observe good chemical hygiene practices.			
Technical measures:	Work practice should minimise contact.			
Technical precautions:	Local exhaust is recommended.			
7.2. Conditions for safe storage, including any incompatibilities				
Technical measures for safe storage:	No special precautions.			
Storage conditions:	Store in tightly closed original container. Store at room temperature.			
7.3. Specific end use(s)				
<u>Specific use(s):</u>	No information available.			

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

CAS-No.:	Chemical name:	<u>As:</u>	Exposure	<u>e limits:</u>	<u>Type:</u>	Notes:	References:
107-21-1	Ethylene glycol	-	50 ppm	127 mg/m3	PEL (Short Term)	-	SG

8.2. Exposure controls

Engineering measures:	Local exhaust is recommended. Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation.
Personal protection:	Personal protection equipment should be chosen according to the ANSI standards and in discussion with the supplier of the personal protective equipment.
Respiratory equipment:	In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. Use respiratory equipment with combination filter, type A2/P2.
Hand protection:	Risk of contact: Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.
Eye protection:	Risk of splashes: Wear goggles/face shield.
Skin protection:	Wear apron or protective clothing in case of contact.
Environmental Exposure Controls:	Not available.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

(*)	
Form:	Liquid.
<u>Odour:</u>	Odourless.
Odour threshold:	Not available.
<u>рН:</u>	9-10
Melting point:	O°C
Boiling point:	100°C
Flash point:	Not relevant.
Evaporation rate:	Not available.
Flammability (solid, gas):	Not available.
Explosion limits:	Not relevant.
Vapour pressure:	Not available.
Vapour density:	Not available.
Relative density:	1-1.2
Solubility:	Miscible with water.
Partition coefficient (n-octanol/water):	Not available.
<u>Auto-ignition</u> temperature (°C):	Not available.
Decomposition temperature (°C):	Not available.
<u>Viscosity:</u>	Not available.
Explosive properties:	Not available.
Oxidising properties:	Not available.
9.2. Other information	
<u>Other data:</u>	Volatile Organic Compound (VOC): 250 g/l (calculated)

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SECTION 10: STABILITY AND REACTIVITY <u>10.1. Reactivity</u>

Reactivity: None under normal conditions. 10.2. Chemical stability Stability: Stable under normal temperature conditions. 10.3. Possibility of hazardous reactions None under normal conditions. Hazardous reactions: 10.4. Conditions to avoid Conditions/materials to avoid: Keep away from heat, sparks and open flame. 10.5. Incompatible materials Incompatible materials: Strong oxidising substances, strong acids and strong bases. 10.6. Hazardous decomposition products Hazardous decomposition In case of fire, toxic gases may be formed. products:

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity (Oral):	Based on available data, the classification criteria are not met.
Acute Toxicity (Dermal):	Based on available data, the classification criteria are not met.
Acute Toxicity (Inhalation):	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.
<u>Respiratory or skin</u> 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:	May cause damage to organs (kidneys) through prolonged or repeated exposure.
Aspiration hazard:	Based on available data, the classification criteria are not met.
Inhalation:	Not relevant at normal room temperatures. When heated, harmful vapours may be formed.
Skin contact:	Prolonged contact may cause redness and irritation. Contains components which may penetrate the skin.
Eve contact:	Splashes may irritate.
Ingestion:	May cause intoxication, headache, dizziness, stomach pains, convulsions, and in serious cases, unconsciousness, acute kidney failure, breathing and heart failure. Lethal dose for an adult person: approx. 50-100 ml (ethanediol).

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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity Ecotoxicity:

The product is not expected to be hazardous to the environment.

12.2. Persistence and degradability

<u>Degradability:</u> The degradability of the product has not been stated.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

<u>PBT/vPvB:</u> No information available.

12.6. Other adverse effects

Other adverse effects: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues:	Dispose of waste and residues in accordance with local authority requirements.
Contaminated packaging:	Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA).

<u>14.1. UN number</u>		
<u>UN-No:</u>	-	
14.2. UN proper shipping nam	<u>le</u>	
Proper Shipping Name:	-	
14.3. Transport hazard class(e	es)	
<u>Class:</u>	-	
14.4. Packing group		
<u>PG:</u>	-	
14.5. Environmental hazards		
Marine pollutant:	-	
Environmentally Hazardous Substance:	-	
14.6. Special precautions for u	Jser	
Special precautions:	None known.	
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		
Transport in bulk:	Not relevant.	

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SECTION 15: REGULATORY INFORMATION

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

National regulation:

Singapore Standard SS 586: Part 2 : 2014; Globally harmonised system of classification and labelling of chemicals - Singapore's adaptations. Singapore Standard SS 586: Part 3 : 2014; Preparation of safety data sheets (SDS). Guidelines on prevention and control of chemical hazard.

SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 6, 9. The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Allan Vorup

Additional information:

Classification according to Singapore Standard SS 586: Part 2 : 2014: Calculation method.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark. www.dhigroup.com.