

Product name: PROTECTING LAQUER
Revision Date: 2014-09-24
Document No.: M0033

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SDS-ID: GB-EN/14.0

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

1.1. Product identifier

Product name: PROTECTING LAQUER
Cat. No. 49900012

Container size: 400 ml

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

Application: For protection of materialographic preparation

1.3. Details of the supplier of the safety data sheet

Supplier: Struers A/S
Pederstrupvej 84
DK-2750 Ballerup
Tel: +45 44 600 800

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:
Lisbeth.Mygind@struers.dk

1.4. Emergency telephone number

Emergency telephone: +45 44 600 800
(Only during office hours)

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The product is classified:

67/548/EEC / 1999/45/EC: F+;R12 Xi;R36 R66 R67 R52/53

GHS/CLP: Aerosol 1;H222 - Eye Irrit. 2;H319 - STOT SE 3;H336 - Aquatic Chronic 3;H412 (*)

2.2. Label elements

(*)



Danger

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P280	Wear protective gloves, eye and face 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 product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. (*)

PBT/vPvB: Not relevant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

The product contains: organic solvent, binders and propellants.

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67/548/EEC:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>REACH Reg. No:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
25-50	67-64-1	200-662-2	-	Acetone	F;R11 Xi;R36 R66 R67	
10-25	106-97-8	203-448-7	-	Butane	F+;R12	C
10-25	74-98-6	200-827-9	-	Propane	F+;R12	
5-<10	1330-20-7	215-535-7	-	Xylene	R10 Xn;R20/21 Xi;R38	C
5-10	108-65-6	203-603-9	-	2-Methoxy-1-methylethyl acetate	R10	
2.5-<5	64742-95-6	265-199-0	-	Solvent naphtha (petroleum), light arom.	R10 Xn;R65 Xi;R37 R66 R67 N;R51-53	H; P
<2,5	100-41-4	202-849-4	-	Ethylbenzene	F;R11 Xn;R20-48/20-65	
<2,5	95-63-6	202-436-9	-	1,2,4-Trimethylbenzene	R10 Xn;R20 Xi;R36/37/38 N;R51-53	
<1	108-67-8	203-604-4	-	1,3,5-Trimethylbenzene	R10 Xi;R37 N;R51-53	
<0,5	98-82-8	202-704-5	-	Cumene	R10 Xn;R65 Xi;R37 N;R51 -53	C
<0,5	103-65-1	203-132-9	-	Propylbenzene	R10 Xn;R65 Xi;R37 N;R51 -53	C

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GHS/CLP:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>REACH Reg. No:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
25-50	67-64-1	200-662-2	-	Acetone	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 EUH066	
10-25	106-97-8	203-448-7	-	Butane	Flam. Gas 1;H220 Press. Gas	C; U
10-25	74-98-6	200-827-9	-	Propane	Flam. Gas 1;H220 Press. Gas	U
5-<10	1330-20-7	215-535-7	-	Xylene	Flam. Liq. 3;H226 Acute Tox. 4;H332 Acute Tox. 4;H312 Skin Irrit. 2;H315	C
5-10	108-65-6	203-603-9	-	2-Methoxy-1-methylethyl acetate	Flam. Liq. 3;H226	
2.5-<5	64742-95-6	265-199-0	-	Solvent naphtha (petroleum), light arom.	Flam. Liq. 3;H226 STOT SE 3;H335 STOT SE 3;H336 Asp. Tox. 1;H304 Aquatic Chronic 2;H411 EUH066	H; P
<2,5	100-41-4	202-849-4	-	Ethylbenzene	Flam. Liq. 2;H225 Acute Tox. 4;H332 STOT RE 2;H373H Asp. Tox. 1;H304	
<2,5	95-63-6	202-436-9	-	1,2,4-Trimethylbenzene	Flam. Liq. 3;H226 Acute Tox. 4;H332 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Aquatic Chronic 2;H411	
<1	108-67-8	203-604-4	-	1,3,5-Trimethylbenzene	Flam. Liq. 3;H226 STOT SE 3;H335 Aquatic Chronic 2;H411	
<0,5	98-82-8	202-704-5	-	Cumene	Flam. Liq. 3;H226 Asp. Tox. 1;H304 STOT SE 3;H335 Aquatic Chronic 2;H411	C
<0,5	103-65-1	203-132-9	-	Propylbenzene	Flam. Liq. 3;H226 Asp. Tox. 1;H304 STOT SE 3;H335 Aquatic Chronic 2;H411	C

References: The full text for all R-phrases and hazard statements are displayed in section 16.

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

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 up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring 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

Medical attention/treatments: Not known.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

5.2. Special hazards arising from the substance or mixture

Specific hazards: The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Aerosol containers can explode when heated, due to excessive pressure build-up.

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

Personal precautions: Do not smoke or use open fire, or other sources of ignition. Avoid inhalation of vapours and aerosols and contact with skin and eyes.

6.2. Environmental precautions

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: Large quantities should not be discharged into the drain but removed with absorbing material. Do not use sawdust or other combustible material.

6.4. Reference to other sections

References: 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 inhalation of vapours and contact with skin and eyes. Observe good chemical hygiene practices.

Technical measures: Do not smoke or use open fire or other sources of ignition.

Technical precautions: Mechanical ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: Follow rules for flammable liquids.

Storage conditions: Store in a cool and well-ventilated place. Avoid contact with oxidising agents.

7.3. Specific end use(s)

Specific use(s): Not relevant.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>		<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
1330-20-7	Xylene, o-, m-, p-or mixed isomers	-	50 ppm	220 mg/m3	TWA	Sk	EH40
		-	100 ppm	441 mg/m3	STEL	Sk; 15min	
98-82-8	Cumene	-	25 ppm	125 mg/m3	TWA	Sk	EH40
		-	50 ppm	250 mg/m3	STEL	Sk; 15min	
108-67-8	Trimethylbenzenes, all isomers or mixtures	-	25 ppm	125 mg/m3	TWA	-	EH40
108-65-6	1-Methoxypropylacetate	-	50 ppm	274 mg/m3	TWA	Sk	EH40
		-	100 ppm	548 mg/m3	STEL	Sk; 15min	
67-64-1	Acetone	-	500 ppm	1210 mg/m3	TWA	-	EH40
		-	1500 ppm	3620 mg/m3	STEL	15min	
100-41-4	Ethylbenzene	-	100 ppm	441 mg/m3	TWA	Sk	EH40
		-	125 ppm	552 mg/m3	STEL	Sk; 15min	
106-97-8	Butane	-	600 ppm	1450 mg/m3	TWA	Carc	EH40
		-	750 ppm	1810 mg/m3	STEL	Carc; 15min	

Notes:

Sk: Can be absorbed through skin.

Carc: Capable of causing cancer and/or heritable genetic damage.

8.2. Exposure controls

Engineering measures:

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours and spray mist. Provide easy access to water supply or an emergency shower.

Personal protection:

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment:

In case of inadequate ventilation: Use respiratory equipment with gas filter, type A2.

Hand protection:

Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection:

Wear goggles/face shield. (*)

Skin protection:

No special precautions.

Environmental Exposure Controls:

Not available.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<u>Appearance:</u>	aerosol
<u>Odour:</u>	characteristic
<u>pH:</u>	Not available.
<u>Boiling point:</u>	Not available.
<u>Flash point:</u>	Not available.
<u>Explosion limits:</u>	1,5-13,0 vol%
<u>Vapour pressure:</u>	8300 hPa (20°C)
<u>Relative density:</u>	0,77
<u>Solubility:</u>	Insoluble in water (<1%)

9.2. Other information

<u>Other data:</u>	Volatile Organic Compound (VOC): 684,9 g/l (calculated)
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

<u>Reactivity:</u>	None known.
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10.2. Chemical stability

<u>Stability:</u>	Stable under normal temperature conditions.
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10.3. Possibility of hazardous reactions

<u>Hazardous Reactions:</u>	None known.
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10.4. Conditions to avoid

<u>Conditions/materials to avoid:</u>	Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid contact with oxidising agents.
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10.5. Incompatible materials

<u>Incompatible materials:</u>	None known.
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10.6. Hazardous decomposition products

<u>Hazardous decomposition products:</u>	No special precautions.
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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation: Vapours and spray mist may irritate throat and respiratory system and cause coughing. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Skin contact: Repeated exposure may cause skin dryness or cracking.

Eye contact: Causes serious eye irritation. (*)

Ingestion: Delayed symptoms include nausea, vomiting, headache and dizziness.

Specific effects: Frequent inhalation of even small concentrations may cause irritability, fatigue and memory failure and eventually permanent damage to the nervous system, including the brain.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity: Harmful to aquatic life with long lasting effects. The product contains volatile, organic compounds which have a photochemical ozone creation potential. (*)

12.2. Persistence and degradability

Degradability: 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

PBT/vPvB: Not relevant.

12.6. Other adverse effects

Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste. Do not puncture or incinerate even when empty.

Waste from residues: Used cloths, etc. EWC-code: 15 02 02

Contaminated packaging: Empty aerosol containers before disposal.
EWC-code: 15 01 10

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SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN-No: 1950

14.2. UN proper shipping name

Proper Shipping Name: AEROSOLS

Additional IMDG information:

EmS: F-D, S-U

MFAG: 1

14.3. Transport hazard class(es)

Class: 2,1

14.4. Packing group

PG: -

14.5. Environmental hazards

Marine pollutant: No.

Environmentally Hazardous substance: No.

14.6. Special precautions for user

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

Special provisions: As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

National regulation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation 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, including amendments.
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 with amendments.
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
EH40/2005, Workplace exposure limits 2005, with amendments.
The Aerosol Dispensers Regulations 2009 (SI 2824), with amendments.
The Management of Health and Safety at Work Regulations 1999 (SI 1999 No. 3242), with amendments.
The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

15.2. Chemical Safety Assessment

CSA status: Not relevant.

SECTION 16: OTHER INFORMATION

For restrictions on use see section 15.

The following sections contain revisions or new statements: 2, 8, 11, 12.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.



Additional information: Classification according to Regulation (EC) No. 1272/2008:
Calculation method.

Wording of
R-phrases/H-statements:

R10	Flammable.
R11	Highly flammable.
R12	Extremely flammable.

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R20	Harmful by inhalation.
R20/21	Harmful by inhalation and in contact with skin.
R36	Irritating to eyes.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

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. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

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