

Material Safety Data Sheet
according to decree (EC) No. 1272 / 2008

Revision: 3

Revision Date: 27.08.20 SW

1. Chemical Product and Company Identification**Product name:**

Pro-Dye LC

Application of the product:

Light curing Varnish for dental technicians

Manufacturer:

Willmann & Pein GmbH

Street:

Schusterring 35

Zip-Code / Town

D-25355 Barmstedt

Contact for technical information

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Emergency Information (24 hours)

Dr. Wolfgang Willmann

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2. Hazard Identification

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

- Skin Irrit. 2	H315	Causes skin irritation
- Eye Irrit. 2	H319	Causes serious eye irritation
- STOT SE 3	H335	May cause respiratory irritation
- Flam Liq. 2	H225	Highly flammable liquid and vapour
- Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects



Warning



Danger

**H315**P264
P280
P302+P352
P321
P332+P313**Causes skin irritation**Wash ... thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of soap and water
Specific treatment (see ... on this label).
If skin irritation occurs: Get medical advice/attention.**H319**P305 + P351 + P338

P337+P313**Causes serious eye irritation**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.**H335**

P261

May cause respiratory irritation.

Avoid breathing dust/fume/gas/mist/vapours/spray.

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P271	Use only outdoors or in a well-ventilated area.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to...
H225	Highly flammable liquid and vapour
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P280	Wear protective gloves/protective clothing/eye protection/face protection/ hearing protection/...
H411	Toxic to aquatic life with long lasting effects
P273	Avoid release to the environment.
P391	Collect spillage.

Additional hazard advices for human and environment:

None

3. Composition/Information on Ingredients**Chemical characterization:****Hazardous ingredients:**

Material	Cas-No./EINECS-No./EG-No.	Content (%)	Marking
Methylmethacrylate	80-62-6 / 201-297-1 / 607-035-00-6	20 – 40 %	H225 Flam. Liq. 2 H315 Skin Irrit. 2 H317 Skin Sens. 1 H335 STOT SE 3
Hydroxyethylmethacrylat	868-77-9 / 212-782-2 / 607-124-00-X	1 – 5 %	H315 Skin Irrit. 2 H317 Skin Sens. 1 H319 Eye Irrit. 2
2-Propensäure	1384855-91-7/-/800	10-30 %	H317 Skin Sens. 1a H319 Eye Irrit. 2 H412 Aquatic Chronic 3
Benzophenon	119-61-9 / 204-337-6	5 – 10 %	H373 STOT SE 2 H412 Aquatic Chronic 3
aliphatic Urethanacrylate in Pentaerythritol- Tri-/Tetraacrylat		10 – 25 %	H302 Acute Tox. 4 H315 Skin Irrit. 2 H317 Skin Sens. 1 H411 Aquatic Chronic 2
2-Hydroxy-2-methylpropiophenone	7043-98-5/-/231-272-0	0,5-3%	H302 Acute Tox.4
2,2 Diethoxyacetophenone	3175-45-7/-/228-220-4	0,05-0,3%	H319 Eye Irrit. 2
2,2-Dimethoxy-1,2-diphenylethan-1-on	24650-42-8/-/246-386-6	0,05-0,5%	H411 Aquatic chronic 2

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4. First-Aid-Measures**General Advices:**

Take off with product contaminated clothes.

Contact a physician if symptoms are obviously showing influence of the product to skin, Eyes or through inhalation of vapour.

After skin contact:

Wash off skin with soap and water.

Contact a physician if the skin is irritated.

After eye contact:

Rinse eyes an efficient time.

Contact ophthalmologist if irritation is persisting.

After inhalation:

Take person to fresh air and rest in relaxed position.

Seek medical treatment.

After swallowing

Seek medical advice immediately.

5. Fire-Fighting-Measures**Suitable extinguishing agents:**

Foam, dry powder, carbon dioxide.

For safety reasons unsuitable extinguishing media:

Water with full jet.

Particular danger through the product itself, its combustion products or gases:

In the event of fire or thermal decomposition there is development of carbon monoxide and carbon dioxide.

Protective equipment for fire-fighters:

Use conventional measures to combat chemical fires, that means use self-contained breathing apparatus (isolating-unit).

6. Accidental release measures**Personal precautions:**

Arrange for fresh air.

Keep ignition sources away.

Environmental protection measures:

Do not drain unpolymerized varnish into canalization.

Methods for cleaning / absorption:

For removing of spots (unpolymerized varnish) it is possible to use a rag soaked with ethyl acetate or isopropanol.

Absorption of small quantities with sand, diatomaceous earth or saw dust.

Dispose according to directions.

Cured material which consist mainly of synthetic (acrylated oligomeres), handle as synthetic waste.

7. Handling and Storage**Handling:**

The conventional precautions for works with chemicals are to be adhered.

Always keep the bottle tightly closed. Provide adequate room ventilation.

Information about fire- and explosion protection:

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Keep away from sources of ignition, do not smoke.

Use only explosion protected devices.

Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

Storage conditions:

Store material in a tightly closed container at a cool place and protected against sunlight.

8. Exposure Controls/Personal Protection**Limit values for the exposition at work station and / or biological limit values****Work station limit values (AGW) Germany**

PNCE and DNCL-Values as to be possibly worked out in a preparation safety report do not exist.

Personal protective equipment::

Pay attention of protection- and hygienic measures. Protection clothes must be stored separately. The usual precaution measures must be attended.

Breathing protection: For smaller quantities (10ml bottles) not necessary

Eye protection: Protection goggles

Hand protection: Sensibilisation: Wearing of applicable protection gloves is recommended. (by experience of the past / literature) for example Ethiparat®-gloves for 5-10 minutes, application of No-touch-Technik, minimal-contact-techniques is recommended.

Body protection: Wear business usual protection clothes.

Other protection measures: none

Advices for hygienic at work station: Comply business usual protection- and hygienic measures. Preventive skin protection. Wash hands and skin after finishing work.

9. Physical and chemical Properties**Appearance:**

Form: liquid

Colour: natural or different colours

Odour/Flavour: acrylates/methacrylates

Safety relevant data:

Flash point: 22 °C

Solubility in water: insoluble in water

Density: not applicable

Ph-value: not applicable

10. Stability and Reactivity**Conditions to avoid**

Beware of heat, solar radiation and light impact to avoid early slow polymerization.

Substances to avoid

Radical former (product polymerises slowly at contact)

Hazardous decomposition products:

None, if used according to directions.

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Further information:

After considerably exceedance of storage time and / or exceedance of storage temperature it is possible that the product starts polymerizing under low heat impact.

11. Toxicological information**Acute Toxicity**

At skin: irritation

At Eyes: irritation

Kinetic of the toxic reaction:

According the new Material Safety Data Sheet according to REACH, specifications about kinetic of the toxic reaction, metabolism of the substance and allocation of the substance in the human body must be mentioned at this place. Data for this is not available .

Further Information:

By appropriate exposure, conventionally use and to our experiences and information the product causes no hazardous effects.

Further details:

Methacrylates may cause allergical reactions.

12. Ecological information**Fish toxicity:** not applicable**Water organism:** not applicable**Bacteria toxicity:** not applicable**Further detail to ecology:**

Do not allow product to reach ground water, body of waters or sewage system!

Bioaccumulation potential:

No data available

Effect of the determination of the PTB- and vPvB-Report:

Endocrine disruption potential

If the material causes hormonal effects or prevents them is unknown to us.

13. Disposal considerations**Substance / Preparation**

To dispose of accordingly with notice of the local regulations of authority.

Do not empty into drains.

Disposal key according to AVV regulation

16 03 05 (organic disposal, that contains hazardous substances)

Package

Packages that are not contaminated can be recycled.

14. Transport information/rules**Land transport ADR/RID**

Classification

Class: 3

UN-Number: 1247

Classification code: F1

Description of the good: Pro-Dye LC

Hazard cause: Methylmethacrylate

Packaging

Packaging group: 2

Hazard sheet: 2.1

Limited Quantities:

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Maritime transport IMDG/GGVSea

Classification

IMDG-Code: -

UN-Number: 1247

EmS: F-E, S-D

Marine Pollutant:

Description of the good:

Hazard cause: Methylmethacrylate

Packaging

Packaging group: 2

Hazard sheet: 2.1

Air transport ICAO-TI and IATA-DGR

Classification

Class: 3

UN-Number: 1247

Description of the good: Pro-Dye LC

Hazard cause: Methylmethacrylate

Packaging

Packaging group: 2

Hazard sheet: 2.1

15. Regulatory Information

GHS-Labeling according to Regulation (EC) No 1272/2008:

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Hazard decisive components for the labelling
contains: --

National Rules**Water hazard class**

Water Hazard Class: 2 (Estimation on the basis of the ingredients)

16. Other information**Further applicable EG Guidelines**

Guideline for preparation (1999/45/EC), at last changed by the guideline 2006/8/EC.
Substance Guideline (67/548/EWG), at last changed by the guideline 2006/121 EC.
REACH-Guideline (EC) No. 1907/2006

Manufacturer's suggested application restriction:

Only for commercial use – no public product

H-phrases on which is referred in chapter 2 and 3

H315	Causes skin irritation	Skin Irrit. 2
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Changes compared to the last version

Change of transport information/rules
Change of GHS-Labeling
Change of composition/information on ingredients
Change of water hazard class

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Change of appearance
Change of solubility in water
Change of disposal key

Department issuing MSDS:

Dr. Wolfgang Willmann (Phone: +49 (0) 41 23 – 9225 0)

Additional Information:

Origin: ¹ <http://www.baua.de>

² <http://www.arbeitssicherheit.de>

Some of the information presented and conclusions drawn herein are from sources other than direct test-data on the product itself.

The contents and format of this MSDS are in accordance with EEC Commission (EC) No. 1907 / 2006.

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