Material Safety Data Sheet according to (EC) 1907/2006

Tradename:

DURASPLINT® LC

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

1.1. Product identifier

Name of product: **DURASPLINT® LC**

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

Use of the substance/mixture
Dental use.

1.3. Details of the supplier of the safety data sheet

Manufacturer / distributor

SCHEU DENTAL GmbH
Am Burgberg 20
D-58642 Iserlohn
Tel. +49 (2374) 9288-0
Fax +49 (2374) 9288-90

eMail: service@SCHEU-DENTAL.com
Internet: www.SCHEU-DENTAL.com

1.4. Emergency telephone number: +49 (2374) 9288-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008 [CLP]
Skin Sens. 1; H317
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No. 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard components for labelling
urethane dimethacrylate (UDMA)
acrylic resin
2,2-bis(acryloyloxymethyl)butyl acrylate (trimethylolpropane triacrylate)
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO)

Signal word: Warning
Hazard Pictograms: GHS07 – GHS09





Hazard statements

H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lastig effects.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection.
P302+P352	IF ON SKIN: Wwash with plenty of soap and water.
P333+P313	Is skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local regulation.

2.3. Other hazards
Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

SECTION 3: Composition / information on ingredients

3.1. Substances
not applicable

3.2. Mixtures
Mixture of acrylic resins, fillers and initiators.

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Index No		
REACH-No		
	urethane dimethacrylate (UDMA)	40 – 70 %
72869-86-4	Skin Sens. 1, Aquatic Chronic 2; H317 H411	
	acrylic resin	< 10 %
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411	
239-701-3	2,2-bis(acryloyloxymethyl)butyl acrylate, trimethylolpropane triacrylate	< 1 %
15625-89-5	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H315 H319 H317	
607-111-00-9		
278-355-8	Diphenyl(2,4,6-trimethylbenzoyl)phonsphine oxide (TPO)	< 1 %
75980-60-8	Repr. 2, Skin Sens. 1, Aquatic Chronic 2; H361f H317 H411	
015-203-00-X		

Additional information
For the wording of the listed H-phrases refer to section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, Mfactors and ATE		
72869-86-4		Urethandimethacrylat (UDMA)	40 – 70 %
	inhalation: LC50 = >5 mg/l (dusts or mists); oral: LD50 = >2000 mg/kg		
75980-60-8	278-355-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO)	1 %
	oral: LD50 = >5000 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General Information: Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours. Take off all contaminated clothing immediately.

After inhalation: Provide fresh air. Medical treatment necessary.

After contact with skin: After contact with skin, wash immediately with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

After contact with eyes: After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion: Do NOT induce vomiting. Medical treatment necessary.

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
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Foam, Fire-extinguishing powder, Carbon dioxide (CO2)

Unsuitable extinguishing media
Full water jet.

5.2. Special hazards arising from the substance or mixture
In case of fire may be liberated: Carbon monoxide. Carbon dioxide. Hazardous decomposition products

5.3. Advice for firefighters

Special protective equipment for fire fighters:
In case of fire: Wear self-contained respiratory protective device.

Additional information
Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions
Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up
Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Advice on safe handling
Provide good room ventilation.

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage:
Requirements for storage rooms and vessels
Protect from the action of light. Keep only in the original container at a temperature between 4 – 25 °C.

Advice on storage compatibility
No special measures are necessary.

Storage class:

7.3. Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection
Tightly fitting goggles.

Hand protection
Gloves should be replaced regularly, especially after extended contact with the product. For each work-place a suitable glove type has to be selected.

Skin protection
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Information

Physical state	pasty
Colour	transparent
Odour	characteristic
pH-Value:	not determined

Changes in the physical state

Melting point	not determined
Initial boiling point and boiling range	not determined
Flash point	> 100 °C
Flammability	

Solid	not applicable
Gas	not applicable
Lower explosion limits	not determined
Upper explosion limits	not determined
Auto-ignition temperature	
Solid	not applicable
Gas	not applicable
Decomposition temperature	not determined
Vapour pressure	not determined
Density	not determined
Water solubility	The study does not need to be conducted because the substance is known tob e insoluble in water
Solubility in other solvents	
The substance is not soluble in water	
Partition coefficient	not determined
Vapour density	not determined
Evaporation rate	not determined

9.2. Other information

Solid content not determined

Product has not been tested. The statement is derived from the properties of the components.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and / or heavy metal ions.

10.4. Conditions to avoid

Protect from the action of light. Keep only in the original container at a temperature between 4 – 25 °C.

10.5. Incompatible materials

Oxidising agent, Reducing agent, Heavy metals, acids, Alkali (lye)

10.6. Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No.	**Chemical name**			
	Exposure route	Method Dose	Species	Source
72869-86-4	urethane dimethacrylate (UDMA)			
	oral	LD50 >2000 mg/kg	Rat	OECD 401
	inhalation (4 h) dust/mist	LC50 >5 mg/kg		
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phoshine oxide (TPO)			
	oral	LD50 >5000 mg/kg	Rat	RTECS

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

Sensitising effects
May cause an allergic skin reaction. (urethane dimethacrylate (UDMA)); acrylic resin; 2,2-bis(acryloyloxymethyl)butyl acrylate, trimethylolpropane triacrylate); Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO))
Possible sensitization in case of persons suffering from hypersensitivity.

CMR effects (carcinogenc, mutagenc and toxic effects for reproduction)
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.

Further information
Product has not been tested. The statement is derived from the properties of the components.

SECTION 12: Ecological Information

12.1. Toxicity
The product has not been tested.

Aquatic toxicity:

CAS No	Chemical name				
	Aquatic toxicity	Method Dose	[h] [d]	Species	Source
72869-86-4	urethane dimethacrylate (UDMA)				
	Acute fish toxicity	LC50 10,1 mg/l	96 h	Brachydanio rerio (zebra-fish)	OECD 203
75980-60-8	diphenyl (2,4,6-trimethylbenzoyl)phosphine oxide (TPO)				
	Acute crustacea toxicity	EC50 3,53 mg/l	48 h	Daphnia	

12.2. Persistence and degradability
The product has not been tested.

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
72869-86-4	urethane dimethacrylate (UDMA)			
	Biodegradation	22 %	28	OECD 301 F

12.3. Bioaccumulative potential
The product has not been tested.

12.4. Mobility in soil
The product has not been tested.

12.5. Results of PBT an vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The product has not been tested.

12.6. Endocrine disrupting properties
This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects
No information available.

Further information:
Do not allow uncontrolled discharge of product into the environment. Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations
Small quantities can be polymerized by light and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities. Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products 070208
WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; other still bottoms and reaction residues.
Classified as hazardous waste.

List of Wastes Code - contaminated packaging 070208
WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; other still bottoms and reaction residues.
Classified as hazardous waste.

Contaminated packaging
This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport Information

Land transport (ADR/RID)

14.1. UN number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	
14.4. Packing group:	

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	
14.4. Packing group:	

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	
14.4. Packaging group:	

Air transport (ICAO)

14.1. UN number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	
14.4. Packaging group:	

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user
No information available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

SECTION 15: Regulatory Information

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

EU regulatory information
Restrictions on use (REACH, annex XVII):
Entry 3, Entry 75

National regulatory information:
Water contaminating class (D): 2- obviously hazardous to water

15.2. Chemical Safety Assessment
Chemical safety assessment for substances in this mixture were not been carried out.

SECTION 16: Other Information

Abbreviations and acronyms

ADR	Accord européen sur le transport 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 Harmonized System of Classification and Labelling of Chemicals
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
CAS	Chemical Abstracts Service (division of the American Chemical Society)
LC50	Lethal concentration, 50 %
LD50	Lethal dose, 50 %

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 3; H411	Calculation method

Relevant H- and EUH-phrases (Number and full text)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
H411	Toxic to aquatic life with long lasting effects.

Further information
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.