

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Trade name : Dental Model UV - White
 Other means of identification : LDNDTWH01, LDNDTWH05

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For use in Photocentric UV LCD Printers
 For use in UV Printers

1.3. Supplier

Supplier

Photocentric Ltd
 Titan House
 20 Titan Drive
 Peterborough, PE1 5XN - United Kingdom
 T +44 (0) 1733 349937 (UK Office hours only)
info@photocentric.co.uk - <https://photocentricgroup.com/>

Only Representative

Photocentric Inc
 855 N. 107th Ave
 Suite A110
 Avondale, Arizona 85323 - United States
 T 006235813220 x1009 (USA Office hours only)
customerservice@photocentricusa.com - <https://photocentricgroup.com/>

1.4. Emergency telephone number

Emergency number : +44 (0) 1733 349937 (UK Office hours only)
 006235813220 x1009 (USA Office hours only)

Transport Emergencies for US & CANADA: For Hazardous Materials [or Dangerous Goods]
 Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC 1-800-424-9300 / +1 703-527-3887 CCN 992854

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Carcinogenicity Category 2	H351	Suspected of causing cancer
Hazardous to the aquatic environment – Chronic Hazard Category 3	H412	Harmful to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

: Warning

Hazard statements (GHS US) :

: H317 - May cause an allergic skin reaction
 H351 - Suspected of causing cancer
 H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS US) :

: P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P261 - Avoid breathing vapors, spray, mist.
 P272 - Contaminated work clothing must not be allowed out of the workplace.
 P273 - Avoid release to the environment.
 P280 - Wear eye protection, protective clothing, protective gloves.
 P302+P352 - If on skin: Wash with plenty of soap and water.
 P308+P313 - If exposed or concerned: Get medical advice/attention.
 P321 - Specific treatment (see supplemental first aid instruction on this label).
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
 P363 - Wash contaminated clothing before reuse.

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P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Conc. (% w/w)	GHS US classification
Proprietary (Dimethacrylate)	≥ 10 – < 15	Aquatic Chronic 3, H412
Proprietary (Photoinitiator)	≥ 1 – < 3	Aquatic Chronic 1, H410
Proprietary (Pigment)	< 1	Carc. 2, H351

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show the label where possible). Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor. Apply artificial respiration if victim is not breathing.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Get medical advice/attention if you feel unwell.
- First-aid measures after ingestion : If swallowed, seek medical advice immediately and show this container or label. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth out with water. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects : May be harmful in contact with skin. Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
- Symptoms/effects after skin contact : May be harmful in contact with skin. May cause an allergic skin reaction.
- Symptoms/effects after eye contact : May cause slight irritation.
- Symptoms/effects after ingestion : May be harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

- Fire hazard : In case of fire, irritating fumes come free.
- Explosion hazard : No direct explosion hazard.
- Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

- Precautionary measures fire : Keep cool. Protect from sunlight. Keep container tightly closed and away from heat, sparks and flame.
- Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
- Other information : High temperature decomposition products are harmful by inhalation. On exposure to high temperature, may decompose, releasing toxic gases.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid contact with skin and eyes. Clean up any spills as soon as possible, using an absorbent material to collect it. Evacuate area. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Ventilate spillage area. See section 8 of the SDS for more information on personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Wear recommended personal protective equipment. Use self-contained breathing apparatus and chemically protective clothing. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Prevent liquid from entering sewers, watercourses, underground or low areas.

6.3. Methods and material for containment and cleaning up

- For containment : For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
- Methods for cleaning up : Take up liquid spill into absorbent material. This material and its container must be disposed of in a safe way, and as per local legislation. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
- Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Ensure that there is a suitable ventilation system. Do not handle in a confined space. Avoid contact with skin, eyes and clothing. Protective clothing (with elasticated cuffs and closed neck). Do not breathe vapors.

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Handling temperature	: 10 – 50 °C
Hygiene measures	: Wear personal protective equipment. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Ensure adequate ventilation, especially in confined areas.
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed. Keep cool. Protect from sunlight. Store locked up.
Storage temperature	: < 25 °C
Storage area	: Store in a well-ventilated place.
Special rules on packaging	: Store in a closed container.
Packaging materials	: Store always product in container of same material as original container. Do not store in corrodable metal.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Dental Model UV - White	
No additional information available	
Proprietary (Dimethacrylate) (109-16-0)	
No additional information available	
Proprietary (Photoinitiator) (162881-26-7)	
No additional information available	
Proprietary (Pigment) (13463-67-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Titanium dioxide
ACGIH OEL TWA	0.2 mg/m ³ (Nanoscale particles. R - Repairable particulate matter) 2.5 mg/m ³ (Finescale particles. R - Repairable particulate matter)
Remark (ACGIH)	TLV® Basis: LRT irr; pneumoconiosis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Titanium dioxide (Total dust)
OSHA PEL TWA	15 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Materials for protective clothing:

Wear suitable protective clothing and gloves. Nitrile rubber. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.

Hand protection:

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Nitrile-rubber protective gloves

Eye protection:

Safety glasses. Safety glasses (EN 166). Chemical goggles or safety glasses

Skin and body protection:

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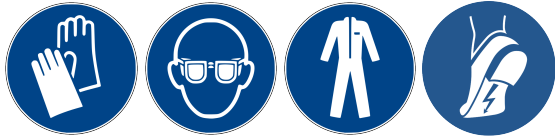
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Wear suitable protective clothing. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact. Wear suitable protective clothing. Protective clothing (EN 14605 or EN 13034)

Respiratory protection:

No respiratory protection needed under normal use conditions. In case of inadequate ventilation wear respiratory protection. Wear suitable respiratory protection (conforming to EN140 with Type A filter or better) and gloves (type EN374) if regular skin contact likely.

Personal protective equipment symbol(s):



Thermal hazard protection:

Typical measures to maintain workplace concentrations of airborne VOCs and particulates below respective OELs: e.g. thermal wet scrubber – gas removal and/or air filtration – particle removal and/or thermal oxidation and/or vapour recovery – adsorption.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid	
Appearance	: Liquid.	
Color	: dark gray	
Odor	: characteristic	
Odor threshold	: No data available	
pH	: No data available	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
Relative evaporation rate (butyl acetate=1)	: No data available	
Flammability	: No data available	
Vapor pressure	: No data available	
Relative vapor density at 20°C	: No data available	
Relative density	: No data available	
Solubility	: No data available	
Partition coefficient n-octanol/water (Log Pow)	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
No data available	Viscosity, kinematic	: No data available
Viscosity, dynamic	: 250 (200 – 350) mPa·s	
Explosion limits	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Proprietary (Dimethacrylate) (109-16-0)	
LD50 oral rat	10837 mg/kg Source: NLM,THOMSON
ATE US (oral)	10837 mg/kg body weight

Proprietary (Photoinitiator) (162881-26-7)	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: other:92/69/EEC

Proprietary (Pigment) (13463-67-7)	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

Proprietary (Pigment) (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

Proprietary (Dimethacrylate) (109-16-0)	
NOAEL (acute,oral,animal/male)	≥ mg/kg body weight

STOT-repeated exposure : Not classified

Proprietary (Dimethacrylate) (109-16-0)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Proprietary (Photoinitiator) (162881-26-7)	
NOAEL (oral,rat,90 days)	> 1000 mg/kg body weight Animal: rat, Guideline: other:92/69/eec

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: May be harmful in contact with skin. Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Proprietary (Dimethacrylate) (109-16-0)	
LC50 - Fish [1]	16.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
LOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
Proprietary (Photoinitiator) (162881-26-7)	
LC50 - Fish [1]	> 0.09 mg/l Test organisms (species): other:Zebra Fish Brachydanio rerio
EC50 - Crustacea [1]	> 1.175 mg/l Test organisms (species): other aquatic crustacea:Daphnia Magna
Proprietary (Pigment) (13463-67-7)	
LC50 - Fish [1]	155 mg/l Test organisms (species): other:Japanese Medaka
EC50 - Crustacea [1]	19.3 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	27.8 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Proprietary (Dimethacrylate) (109-16-0)	
Partition coefficient n-octanol/water (Log Pow)	1.88 Source: ChemIDplus

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Avoid release to the environment. Comply with applicable regulations for solid waste disposal. Dispose in a safe manner in accordance with local/national regulations. Disposal must be done according to official regulations.
Additional information	: Clean up even minor leaks or spills if possible without unnecessary risk. Consult an expert on waste disposal or treatment. Do not re-use empty containers.
Ecological waste information	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

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Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Proprietary (Dimethacrylate)	CAS-No. 109-16-0	≥ 10 – < 15%
Proprietary (Photoinitiator)	CAS-No. 162881-26-7	≥ 1 – < 3%
Proprietary (Pigment)	CAS-No. 13463-67-7	< 1%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Proprietary (Photoinitiator) (162881-26-7)

EPA TSCA Regulatory Flag	PMN - PMN - indicates a commenced PMN substance.
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15.2. International regulations

CANADA

Proprietary (Dimethacrylate) (109-16-0)

Listed on the Canadian DSL (Domestic Substances List)

Proprietary (Photoinitiator) (162881-26-7)

Listed on the Canadian DSL (Domestic Substances List)

Proprietary (Pigment) (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

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Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Proprietary (Dimethacrylate) (109-16-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Proprietary (Photoinitiator) (162881-26-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Proprietary (Pigment) (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of hazard classes and H-statements:

H317	May cause an allergic skin reaction
H351	Suspected of causing cancer
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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SDS US (GHS HazCom 2012) No CAS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.