

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 12/03/2026 Revision date: 22/07/2026 Supersedes: 12/03/2026 Version: 2.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : Model Maker - Grey

1.2. Other means of identification

Other means of identification : MKRMMGY01; MKRMMGY05

1.3. Recommended use of the chemical and restrictions on use

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

1.4. Supplier's details

Manufacturer

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

Distributor

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

1.5. Emergency phone number

Emergency number : +44 (0) 1733 349937 (UK Office hours only)
006235813220 x1009 (USA Office hours only)
North America Emergency Number: 911
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 Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 4	H227	Combustible liquid.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Carcinogenicity, Category 2	H351	Suspected of causing cancer.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H227 - Combustible liquid
H302 - Harmful if swallowed
H351 - Suspected of causing cancer.
H411 - Toxic to aquatic life with long lasting effects

Model Maker - Grey

Safety Data Sheet

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

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P330 - Rinse mouth.
P370+P378 - In case of fire: Use appropriate media to extinguish.
P391 - Collect spillage.
P403 - Store in a well-ventilated place.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Conc. (% w/w)	GHS US classification
Proprietary (Monomer)	≥ 25 – < 50	Acute Tox. 4 (Oral), H302
Proprietary (Diacylate)	≥ 10 – < 20	Aquatic Chronic 2, H411
Proprietary (Photoinitiator)	≥ 1 – < 3	Acute Tox. 4 (Dermal), H312 Aquatic Chronic 1, H410
Proprietary (Photoinitiator)	≥ 1 – < 3	Aquatic Chronic 1, H410
Proprietary (Pigment)	< 1	Carc. 2, H351 Aquatic Chronic 3, H412

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

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.

Model Maker - Grey

Safety Data Sheet

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

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
-----------------------------------	--------------------------

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: 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	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. 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.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
------------------	---

For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area.

For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions	: Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment	: Collect spillage. 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. Notify authorities if product enters sewers or public waters.

Model Maker - Grey

Safety Data Sheet

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

Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

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. 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.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Handling temperature : $\leq 30^{\circ}\text{C}$

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store locked up.

Storage temperature : $10 - 50^{\circ}\text{C}$

Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Proprietary (Pigment)	
USA - ACGIH® - Threshold Limit Values	
Local name	Titanium dioxide
ACGIH® TLV® TWA	0.2 mg/m³ (Nanoscale particles. R - Respirable particulate matter) 2.5 mg/m³ (Finescale particles. R - Respirable 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/m³
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, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Model Maker - Grey

Safety Data Sheet

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

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:

Protective gloves. Wear protective gloves. 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:

Wear suitable protective clothing. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact. Protective clothing (EN 14605 or EN 13034). Use footwear with anti-static or anti-spark features

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. 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. Basic physical and chemical properties

Physical state	: Liquid
Color	: 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	: > 65 °C
Flammability (solid, gas)	: Not applicable.
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
Viscosity, kinematic	: No data available
Viscosity, dynamic	: ≈ 420 mPa·s
Explosion limits	: No data available
Particle characteristics	: No data available

Model Maker - Grey

Safety Data Sheet

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

Proprietary (Monomer)

Particle characteristics	No data available
--------------------------	-------------------

Proprietary (Diacylate)

Particle characteristics	No data available
--------------------------	-------------------

Proprietary (Photoinitiator)

Particle characteristics	No data available
--------------------------	-------------------

Proprietary (Photoinitiator)

Particle characteristics	No data available
--------------------------	-------------------

Proprietary (Pigment)

Particle characteristics	No data available
--------------------------	-------------------

9.2. Data relevant with regard to physical hazard classes (supplemental)

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.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Model Maker - Grey

Safety Data Sheet

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

Model Maker - Grey	
ATE US (oral)	1837.5 mg/kg body weight
Proprietary (Monomer)	
LD50 oral rat	588 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	5.28 mg/l/4h
ATE US (oral)	588 mg/kg body weight
ATE US (dust, mist)	5.28 mg/l/4h
Proprietary (Diacrylate)	
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Proprietary (Photoinitiator)	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	≥ 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:
ATE US (dermal)	1100 mg/kg body weight
Proprietary (Photoinitiator)	
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)	
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)
LC50 Inhalation - Rat (Dust/Mist)	> 3.43 mg/l Source: ECHA
Skin corrosion/irritation	: Not classified
Proprietary (Monomer)	
pH	7 – 9
Proprietary (Pigment)	
pH	7
Serious eye damage/irritation	: Not classified
Proprietary (Monomer)	
pH	7 – 9
Proprietary (Pigment)	
pH	7
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

Model Maker - Grey

Safety Data Sheet

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

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

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Proprietary (Diacylate)	
NOAEL (oral,rat,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

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

Aspiration hazard : Not classified

Model Maker - Grey	
Viscosity, kinematic	No data available

Proprietary (Monomer)	
Viscosity, kinematic	10.084 mm ² /s

Proprietary (Diacylate)	
Viscosity, kinematic	No data available

Proprietary (Photoinitiator)	
Viscosity, kinematic	No data available

Proprietary (Photoinitiator)	
Viscosity, kinematic	No data available

Proprietary (Pigment)	
Viscosity, kinematic	No data available

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Proprietary (Monomer)	
EC50 72h - Algae [1]	120 mg/l

Proprietary (Diacylate)	
LC50 - Fish [1]	2.2 – 4.64 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	22.3 mg/l Test organisms (species): Daphnia magna

Model Maker - Grey

Safety Data Sheet

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

Proprietary (Diacrylate)	
EC50 72h - Algae [1]	16.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Proprietary (Photoinitiator)	
LC50 - Fish [1]	1.89 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	2.26 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	1.01 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	0.239 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Proprietary (Photoinitiator)	
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
EC50 72h - Algae [1]	> 0.26 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Proprietary (Pigment)	
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
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
12.2. Persistence and degradability	
Model Maker - Grey	
Persistence and degradability	Not rapidly degradable
Proprietary (Monomer)	
Persistence and degradability	Not rapidly degradable
Proprietary (Diacrylate)	
Persistence and degradability	Not rapidly degradable
Proprietary (Photoinitiator)	
Persistence and degradability	Not rapidly degradable
Proprietary (Photoinitiator)	
Persistence and degradability	Not rapidly degradable
Proprietary (Pigment)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

Model Maker - Grey

Safety Data Sheet

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

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Fluorinated greenhouse gases :
: No

SECTION 13 Disposal considerations

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 : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (TDG) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (TDG) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

Model Maker - Grey

Safety Data Sheet

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

14.7. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

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

Proprietary (Photoinitiator)	≥ 1 – < 3%
------------------------------	------------

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Proprietary (Monomer)	≥ 25 – < 50%
-----------------------	--------------

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.

15.2. International regulations

CANADA

Proprietary (Monomer)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Proprietary (Diacrylate)

Listed on the Canadian DSL (Domestic Substances List)

Proprietary (Photoinitiator)

Listed on the Canadian DSL (Domestic Substances List)

Proprietary (Pigment)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Proprietary (Diacrylate)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Model Maker - Grey

Safety Data Sheet

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

Proprietary (Photoinitiator)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Proprietary (Pigment)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. 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

Revision date : 22/07/2026

Issue date : 12/03/2026

Full text of hazard classes and H-statements

H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H351	Suspected of causing cancer.
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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.