

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 14/03/2025 Revision date: 17/04/2025 Supersedes: 14/03/2025 Version: 2.0

#### **SECTION 1 Identification**

#### 1.1. Product identifier

Product form : Mixture

Trade name Rigid DLFR - Black

#### 1.2. Other means of identification

Other means of identification : MAGFRBK05

#### 1.3. Recommended use of the chemical and restrictions on use

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

#### 1.4. Supplier's details

Manufacturer **Distributor** Photocentric Ltd Photocentric Inc Titan House 855 N. 107th Ave 20 Titan Drive Suite A110

Peterborough, PE1 5XN, Cambridgeshire Avondale, Arizona, AZ, 85323

**United States** United Kingdom

T +44 (0) 1733 349937 (UK Office hours only) T 006235813220 x1009 (USA Office hours only)

info@photocentric.co.uk - https://photocentricgroup.com/ <u>customerservice@photocentricusa.com</u> - <u>https://photocentricgroup.com/</u>

#### 1.5. Emergency phone number

: +44 (0) 1733 349937 (UK Office hours only) **Emergency number** 

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 Identification**

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Serious eye damage/eye irritation, Category 1 H318 Causes serious eye damage. Skin sensitization, Category 1 H317 May cause an allergic skin reaction. 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)

Hazard statements (GHS US) H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

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Precautionary statements (GHS US)

: P261 - Avoid breathing dust, fume, gas, mist, vapours, spray.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing

protection.

P302+P352 - If on skin: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a poison center or doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

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 (Triacrylate)		Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Proprietary (Diacrylate)	≥ 25 - < 50	Aquatic Chronic 2, H411
Proprietary (Aliphatic urethane methacrylate)	≥ 5 – < 10	Aquatic Chronic 2, H411

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 you feel unwell, seek medical advice.

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. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion

: Call a poison center/doctor/physician if you feel unwell.

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#### 4.2. Most important symptoms/effects, acute and delayed

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 cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : None under normal conditions.

#### 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. Avoid contact with skin and eyes. Avoid breathing

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

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.

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

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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. Avoid contact with skin and eyes. Avoid breathing

dust/fume/gas/mist/vapours/spray. 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. Do

not handle until all safety precautions have been read and understood.

Hygiene measures : 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.

Handling temperature : ≤ 30 °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 : Keep cool. Protect from sunlight.

Storage temperature : 10 - 50 °C

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

# **SECTION 8 Exposure controls/personal protection**

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropiate 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.

#### 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

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#### 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.

No data available

# **SECTION 9 Physical and chemical properties**

#### 9.1. Basic physical and chemical properties

Physical state : Liquid : Liquid. Appearance Black Color Odor characteristic Odor threshold No data available No data available рΗ Melting point Not applicable Freezing point No data available Boiling point No data available Flash point No data available Flammability (solid, gas) 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 Viscosity, kinematic No data available

760 (500 - 900) mPa·s @25 °C Viscosity, dynamic **Explosion limits** No data available

Particle characteristics No data available

# **Proprietary (Aliphatic urethane methacrylate)**

Particle characteristics No data available

#### **Proprietary (Triacrylate)**

Particle characteristics No data available

#### **Proprietary (Diacrylate)**

Particle characteristics No data available

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

No additional information available

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### **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. Likely routes of exposure

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

Acute toxicity (inhalation)	Not classified
Proprietary (Aliphatic urethane methacrylate	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bw/day
LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l/4h
Proprietary (Triacrylate)	
LD50 oral rat	No mortality/Rat: 2.000 mg/kg (Method: OECD Test Guideline 423)
Proprietary (Diacrylate)	
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation :	Not classified
Proprietary (Triacrylate)	
pH	6 – 8
Serious eye damage/irritation :	Causes serious eye damage.

Serious eve damage/irritation	: Causes serious eve damage.

Proprietary (Triacrylate)	
рН	6 – 8

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

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Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Proprietary (Triacrylate)	
NOAEL (animal/male, F0/P)	50 mg/kg body weight NOAEL ( Parental toxicity ) (Method: OECD Test Guideline 422, Rat, By oral route)
NOAEL (animal/female, F0/P)	> 200 mg/kg body weight NOAEL ( fertility) (Method: OECD Test Guideline 422, Rat, By oral route)
NOAEL (animal/male, F1)	> 200 mg/kg body weight NOAEL (developmental toxicity) (Method: OECD Test Guideline 422, Rat, By oral route)

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

Proprietary (Triacrylate)	
LOAEL (oral,rat,90 days)	100 mg/kg bodyweight/day Local Irritation (Method: OECD Test Guideline 422, Rat, 28 d)
NOAEL (oral,rat,28 days)	50 mg/kg bodyweight/day (Method: OECD Test Guideline 422, Rat, 28 d)
Proprietary (Diacrylate)	
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)

Aspiration hazard : Not classified

Rigid DLFR - Black	
Viscosity, kinematic No data available	
Proprietary (Aliphatic urethane methacrylate)	
Viscosity, kinematic	No data available

Proprietary (Triacrylate)

Viscosity, kinematic Not applicable

**Proprietary (Diacrylate)** 

Viscosity, kinematic No data available

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 cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes. Symptoms/effects after ingestion : None under normal conditions.

### **SECTION 12 Ecological information**

# 12.1. Ecotoxicity

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

Hazardous to the aquatic environment, short–term : Not classified

(acute)

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

(GIII OF IIC)	
Proprietary (Aliphatic urethane methacrylate)	
LC50 - Fish [1]	≥ 10.1 mg/l Zebra Fish (Brachydanio rerio)
EC50 - Crustacea [1]	> 1200 µg/l Test organisms (species): Daphnia magna

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Proprietary (Aliphatic urethane methacrylate)		
EC50 72h - Algae [1]	> 0.68 mg/l	
NOEC chronic algae	0.21 mg/l Green Algae (Desmodesmus subspicatus)	
Proprietary (Triacrylate)		
EC50 72h - Algae [1]	25.7 mg/l Pseudokirchneriella subcapitata (green algae) l (Method: OECD Test Guideline 201)	
ErC50 algae	25.7 mg/l 72 h (Pseudokirchneriella subcapitata (green algae)) :(Method: OECD Test Guideline 201)	
NOEC (chronic)	≥ 100 mg/l NOEC, 14 d (Activated sludge)(Respiration inhibition)	
Proprietary (Diacrylate)		
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	
EC50 72h - Algae [1]	16.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	

# 12.2. Persistence and degradability

Rigid DLFR - Black		
Persistence and degradability	Not rapidly degradable	
Proprietary (Aliphatic urethane methacrylate)		
Persistence and degradability	Not established.	
Biodegradation	22 % CO2 Evolution: Modified Sturm (OECD 301B)	
Proprietary (Triacrylate)		
Persistence and degradability	Not rapidly degradable	
Biodegradation	14.5 – 19.7 % after 28 d (Method: OECD Test Guideline 301 F)	
Proprietary (Diacrylate)		
Persistence and degradability	Not rapidly degradable	

# 12.3. Bioaccumulative potential

Proprietary (Aliphatic urethane methacrylate)	
Partition coefficient n-octanol/water (Log Pow)	3.39
Bioaccumulative potential	No bioaccumulation data available.

# 12.4. Mobility in soil

Proprietary (Triacrylate)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.79 ( Method: calculated ) Absorption / desorption:

# 12.5. Other adverse effects

.

Fluorinated greenhouse gases : No

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#### **SECTION 13 Disposal considerations**

Regional waste regulation : Disposal must be done according to official regulations.

Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste treatment methods

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

UN-No.(DOT) : Not regulated UN-No. (TDG) Not regulated UN-No. (IMDG) 3082 UN-No. (IATA) 3082

### 14.2. UN Proper Shipping Name

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

Proper Shipping Name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Proper Shipping Name (IATA) Environmentally hazardous substance, liquid, n.o.s.

### 14.3. Transport hazard class(es)

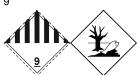
Transport hazard class(es) (DOT) : Not regulated

**TDG** 

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

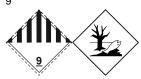
Transport hazard class(es) (IMDG) : 9

9 Hazard labels (IMDG)



#### **IATA**

Transport hazard class(es) (IATA) : 9 Hazard labels (IATA)



#### 14.4. Packing group

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

Packing group (IMDG) Ш Packing group (IATA) : 111

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#### 14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes



Other information : No supplementary information available.

### 14.6. Transport in bulk

Not applicable

#### 14.7. Special precautions for user

#### DOT

Not regulated

#### **TDG**

Not regulated

#### **IMDG**

Special provision (IMDG) : 274, 335, 969

Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001
Packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS

Stowage category (IMDG) : A

#### **IATA**

Special provision (IATA) : A97, A158, A197, A215

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) : Y964 PCA limited quantity max net quantity (IATA) : 30kgG PCA packing instructions (IATA) : 964 PCA max net quantity (IATA) : 450L CAO packing instructions (IATA) : 964 CAO max net quantity (IATA) : 450L ERG code (IATA) 9L

# **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

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.

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#### 15.2. International regulations

#### CANADA

#### **Proprietary (Aliphatic urethane methacrylate)**

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

### **Proprietary (Triacrylate)**

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

# **Proprietary (Diacrylate)**

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)

#### 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**

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Full text of hazard classes and H-statements	
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H411	Toxic 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.