

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Resin 3D-Cleaner
Revision date : 12.11.2024
Print date : 03.02.2025

Version : 1.0.0

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

1.1 Product identifier

Resin 3D-Cleaner
Unique Formula Identifier : 60Q0-R0FU-R00Y-5H98

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

Relevant identified uses

PC 35 - Washing and cleaning products

1.3 Details of the supplier of the safety data sheet

Supplier

Bio-Circle Surface Technology GmbH

Street : Berensweg 200

Postal code/City : 33334 Gütersloh

Telephone : +49 5241 9443 0

Telefax : +49 5241 9443 44

Information contact : labor@bio-circle.de

1.4 Emergency telephone number

+49 5241 9443 51 during normal office hours
(Monday to Thursday from 8 am to 4 pm and Friday from 8 am to 3 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Exclamation mark (GHS07)

Signal word

Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

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PROPYLENE CARBONATE ; EC No. : 203-572-1; CAS No. : 108-32-7

Weight fraction : $\geq 25 - < 50 \%$

Classification 1272/2008 [CLP] : Eye Irrit. 2 ; H319

Further ingredients

3-METHOXYBUTAN-1-OL ; REACH No. : 01-2119548352-41-XXXX ; EC No. : 219-741-8; CAS No. : 2517-43-3

Weight fraction : $\geq 1 - < 5 \%$

Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Remove contaminated, saturated clothing immediately.

Following inhalation

Remove casualty to fresh air and keep warm and at rest.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

Following ingestion

Rinse mouth thoroughly with water. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Extinguishing powder Carbon dioxide (CO₂) Sand Nitrogen Extinguishing blanket

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide , Carbon dioxide (CO₂)

5.3 Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers. Apply foam in abundant quantities since some of it gets destroyed by the product. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Fire transmission possible. Move undamaged containers from immediate hazard area if it can be done safely.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition. Provide adequate ventilation.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Cover drains.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for 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

Keep container tightly closed. Provide adequate ventilation as well as local exhaust at critical locations.

Protective measures

Measures to prevent fire

The product is: Combustible

7.2 Conditions for safe storage, including any incompatibilities

Ensure adequate ventilation of the storage area. Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Storage class (TRGS 510) : 10

Do not store together with

Food and feedingstuffs

Keep away from

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

PROPYLENE CARBONATE ; CAS No. : 108-32-7

Limit value type (country of origin) : TRGS 900 (D)

Limit value : 2 ppm / 8,5 mg/m³

Peak limitation : 1(I)

Remark : Y

Version : 23.06.2022

DNEL-/PNEC-values

DNEL/DMEL

PROPYLENE CARBONATE ; CAS No. : 108-32-7

Limit value type : DNEL Consumer (local)

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 10 mg/m³

Limit value type : DNEL Consumer (systemic)

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Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	17,4 mg/m ³
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	10 mg/kg bw/day
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	10 mg/kg bw/day
Limit value type :	DNEL worker (local)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	20 mg/m ³
Limit value type :	DNEL worker (local)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	10 mg/m ³
Limit value type :	DNEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	70,53 mg/m ³
Limit value type :	DNEL worker (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	20 mg/kg bw/day

PNEC

PROPYLENE CARBONATE ; CAS No. : 108-32-7

Limit value type :	PNEC (Aquatic, freshwater)
Limit value :	900 µg/l
Limit value type :	PNEC (Aquatic, intermittent release)
Limit value :	9000 µg/l
Limit value type :	PNEC (Aquatic, marine water)
Limit value :	90 µg/l
Limit value type :	PNEC (Soil)
Limit value :	0,81 mg/kg dw
Limit value type :	PNEC (Sewage treatment plant)
Limit value :	7400 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection



Wear suitable safety goggles in case of splash.

Suitable eye protection

EN 166.

Skin protection

Hand protection

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Suitable gloves type : EN 374.
Suitable material : Butyl caoutchouc (butyl rubber)
Breakthrough time : 480 min.
Thickness of the glove material : 0.3 mm.

Remark : The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection



Respiratory protection necessary at: exceeding exposure limit values
Usually no personal respiratory protection necessary.

Suitable respiratory protection apparatus

Combination filtering device
Filter type: A P2

Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

General information

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. Do not put any product-impregnated cleaning rags into your trouser pockets. P264 - Wash hands thoroughly after handling.

8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid

Colour : light yellow

Odour

fruity , sweetish

Safety characteristics

Melting point/freezing point :	(1013 hPa)	<=	-50 °C	
Initial boiling point and boiling range :	(1013 hPa)	>	150 °C	
Flash point :			96 °C	DIN EN ISO 13736
Auto-ignition temperature :	(1-(2-butoxy-1-methylethoxy)propan-2-ol)		194 °C	Literature value
Auto-ignition temperature :			°C	
Flammability :			flammable	
Lower explosion limit :	(1-(2-butoxy-1-methylethoxy)propan-2-		0,6 Vol-%	Literature value

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Vapour pressure :	ol) (20 °C)	<	2 hPa	Calculated
Density :	(20 °C)		1,02 g/cm ³	
Water solubility :	(20 °C)		partially soluble	
pH :	(20 °C)		not applicable	
Cinematic viscosity :	(20 °C)	<	30 mm ² /s	
Relative vapour density :	(20 °C)		not determined	
Maximum VOC content (EC) :			2 Weight-%	
Maximum VOC content (Switzerland) :			47 Weight-%	
Taxable VOC content (Switzerland) :			45 Weight-%	

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Violent reaction with: Oxidising agent, strong. Formation of: Peroxides.

10.2 Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

Acid . Alkali (lye). Oxidizing agent. Peroxides.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.
Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Corrosion

Skin corrosion/irritation

No further relevant information available.

Serious eye damage/eye irritation

Parameter :	Serious eye damage/eye irritation (PROPYLENE CARBONATE ; CAS No. : 108-32-7)
Species :	Rabbit
Result :	Causes serious eye irritation
Method :	OECD 405

Result / Evaluation

Causes serious eye irritation.

Respiratory or skin sensitisation

Skin sensitisation

No further relevant information available.

Sensitisation to the respiratory tract

No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No further relevant information available.

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Germ cell mutagenicity

No further relevant information available.

Reproductive toxicity

No further relevant information available.

STOT-single exposure

No further relevant information available.

STOT-repeated exposure

No further relevant information available.

Aspiration hazard

No further relevant information available.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

Other adverse effects

May be absorbed through the skin. Frequently or prolonged contact with skin may cause dermal irritation.

Additional information

Preparation not tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter : LC50 (PROPYLENE CARBONATE ; CAS No. : 108-32-7)
Species : Cyprinus carpio (Common Carp)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : > 1000 mg/l
Exposure time : 96 h
Method : OECD 203

Acute (short-term) toxicity to crustacea

Parameter : EC50 (PROPYLENE CARBONATE ; CAS No. : 108-32-7)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) toxicity to crustacea
Effective dose : > 1000 mg/l
Exposure time : 48 h
Method : OECD 202

Acute (short-term) toxicity to algae and cyanobacteria

Parameter : EC50 (PROPYLENE CARBONATE ; CAS No. : 108-32-7)
Species : Desmodesmus subspicatus
Evaluation parameter : Inhibition of growth rate
Effective dose : > 900 mg/l
Exposure time : 72 h
Method : OECD 201

Toxicity to microorganisms

Parameter : EC50 (PROPYLENE CARBONATE ; CAS No. : 108-32-7)
Species : Pseudomonas putida
Evaluation parameter : Toxicity to microorganisms
Effective dose : 25619 mg/l
Exposure time : 16 h

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Method : DIN 38412 / part 8
Parameter : EC10 (PROPYLENE CARBONATE ; CAS No. : 108-32-7)
Species : Pseudomonas putida
Evaluation parameter : Toxicity to microorganisms
Effective dose : 7400 mg/l
Exposure time : 16 h
Method : DIN 38412 / part 8

12.2 Persistence and degradability

Biodegradation

Parameter : CO2 formation (% of the theoretical value) (PROPYLENE CARBONATE ; CAS No. : 108-32-7)
Inoculum : Biodegradation
Evaluation parameter : Aerobic
Degradation rate : 83,5 %
Test duration : 29 D
Evaluation : Readily biodegradable (according to OECD criteria).
Method : OECD 301B

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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.

12.8 Additional ecotoxicological information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste codes/waste designations according to EWC/AVV

20 01 29* (Detergents containing hazardous substances)
07 06 04* (Other organic solvents, washing liquids and mother liquors)

Other disposal recommendations

Dispose of waste according to applicable legislation. Dispose of contents/container to an appropriate recycling or disposal facility. Contaminated packages must be completely emptied and can be re-used following proper cleaning (Water (with cleaning agent)). Handle contaminated packages in the same way as the substance itself.

13.2 Additional information

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

14.1 UN number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

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- No dangerous good in sense of these transport regulations.
- 14.3 Transport hazard class(es)**
No dangerous good in sense of these transport regulations.
- 14.4 Packing group**
No dangerous good in sense of these transport regulations.
- 14.5 Environmental hazards**
No dangerous good in sense of these transport regulations.
- 14.6 Special precautions for user**
None
- 14.7 Maritime transport in bulk according to IMO instruments**
No transport as bulk according to IBC Code.

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- EU legislation**
- Authorisations and/or restrictions on use**
- Restrictions on use**
Use restriction according to REACH annex XVII, no. : 3, 75
- Restrictions of occupation**
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
- Other regulations (EU)**
- Labelling for contents according to regulation (EC) No. 648/2004**
< 5 % non-ionic surfactants
- National regulations**
- Technische Anleitung zur Reinhaltung der Luft (TA-Luft)**
Weight fraction (Number 5.2.5. I) : < 5 %
- Water hazard class**
Classification according to AwSV - Class : 1 (Slightly hazardous to water)
- 15.2 Chemical Safety Assessment**
For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

- 16.1 Indication of changes**
None
- 16.2 Abbreviations and acronyms**
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europäisches Übereinkommen über die Beförderung gefährlicher Güter auf der Straße)
AOX: adsorbierbare organisch gebundene Halogene
AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
CAS: Chemical Abstracts Service (Unterabteilung der American Chemical Society)
CLP: Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen (Classification Labelling and Packaging)
EAK / AVV: europäischer Abfallartenkatalog / Abfallverzeichnis-Verordnung
ECHA: Europäische Chemikalienagentur (European Chemicals Agency)
EINECS: : Altstoffverzeichnis (European Inventory of Existing Commercial Chemical Substances)
GHS: Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien (Globally Harmonized System of Classification and Labelling of Chemicals)
IATA: Internationale Luftverkehrs-Vereinigung (International Air Transport Association)

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ICAO: Internationale Zivilluftfahrtorganisation (International Civil Aviation Organization)
IMDG: Gefahrgutkennzeichnung für gefährliche Güter im Seeschiffverkehr (International Maritime Code for Dangerous Goods)
RID: Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr (Règlement concernant le transport international ferroviaire de marchandises dangereuses)
TRGS: Technische Regel für den Umgang mit Gefahrstoffen
VbF: Verordnung über brennbare Flüssigkeiten
VOC: flüchtige organische Verbindung (volatile organic compound)
VVEA: Verordnung über die Vermeidung und die Entsorgung von Abfällen
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank
ECHA: Classification And Labelling Inventory
ECHA: Pre-registered Substances
ECHA: Registered Substances
EC_Safety Data Sheet of Suppliers
ESIS: European Chemical Substances Information System
GDL: Gefahrstoffdatenbank der Länder
UBA Rigoletto: Wassergefährdende Stoffe
Regulation (EC) No. 1907/2006 of the European Parliament and of the Council
I-> COMMISSION REGULATION (EU) 2020/878 of 18 June 2020
Regulation (EC) No. 1272/2008 of the European Parliament and of the Council

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

This substance is classified as hazardous according to Regulation (EC) No 1272 (2008).
Evaluation :
Eye Irrit. 2 : Calculation method.

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

H319 Causes serious eye irritation.

16.6 Training advice

None

16.7 Additional information

None

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.