

(SDS) Safety Data Sheet for Chemical Products

3D BUSINESS S.R.L.

Date/Revised:15/12/2024 Rev_01

SECTION 1. Identification of the substance/preparation and company

- 1.1 Product Name: 3DB-COMPACT GUIDE Resin UV
 1.2 Product Model: Surgical Guide Resin
 1.3 Main Application: 3D printing material
 1.4 Applicant Name: 3D BUSINESS S.R.L
 1.5 Applicant Address: Via Verra, 66/a - Trecate (NO) 28069, Italy
 1.6 Manufacturer Tel: +39 0321037776
 1.7 Manufacturer Email: info@3dbusiness.it
 1.8 Emergency Contacts: listed below

Ph.:	+44 (0) 1235-239670	EMEA Carechem24 Europe/ Middle East/Africa
Ph.:	(+39) 071-8001	Centro Antiveleni Ancona CAV INRCA
Ph.:	(+39) 055-7947819	Centro Antiveleni Firenze CAV Careggi
Ph.:	(+39) 0832-351105	Centro Antiveleni Lecce CAV V. Fazzi
Ph.:	(+39) 02-66101029	Centro Antiveleni Milano CAV Niguarda Cà Grande
Ph.:	(+39) 081-7472870	Centro Antiveleni Napoli CAV A.O.R.N. Cardarelli
Ph.:	(+39) 06-3054343	Centro Antiveleni Roma CAV Policlinico A. Gemelli
Ph.:	(+39) 011-6637637	Centro Antiveleni Torino CAV Molinette
Ph.:	(+39) 091-479499	Centro Antiveleni Palermo CAV Buccheri La Ferla

SECTION 2. Hazards identifications

2.1 Classification of the substance or mixture:

Classification in accordance with Directive 67/548/EEC, Directive 1999/45/EC, and Regulation (EC) No. 1272/2008 (CLP), along with subsequent amendments and modifications.

2.2 Labeling Components:

Labeling in accordance with the criteria set forth in Regulation (EC) No. 1272/2008 [CLP].

2.3 Pictograms:



2.4 Signal word:

Warning

2.5 Hazard Class (GHS)

According to Globally Harmonized System of Classification and Labeling of Chemicals (GHS) (part 2~4), classification of risk categories.

Skin corrosion/irritation, categories 2

Sensitization, skin, categories 1

Serious eye damage/eye irritation, categories 2A

Aquatic Chronic 2

2.6 Hazard description:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects

2.7 Precautionary description:

P261	Avoid breathing dust/fume/gas/mist/vapor/spray
P264	Wash hand and face thoroughly after handling
P272	Contaminated work attire must not be permitted to leave the workplace
P273	Avoid releasing into the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P264+P265	Thoroughly wash hands and skin after handling. Avoid contact with eyes.

2.8 Accident response:

- P332+P317 If skin irritation occurs, seek medical attention
P333+P317 If skin irritation or rash occurs, seek medical attention
P302+P352 If on skin: Wash with plenty of soap and water
P362+P364 Take off contaminated clothing and wash it before reusing
P337+P317 If eye irritation persists: Get medical advice/attention
P305+P351 If in eyes: Rinse cautiously with water for several minutes. Remove contact
+P338 lenses, if present and easy to do. Continue rinsing
P391 Collect spillage

2.9 Conservation:

- P405 Store in a sealed container

3.0 Disposal of waste:

- P501 Dispose of contents and container in accordance with local, regional and international regulations or to the hazardous waste or special waste collection company for disposal

3.1 Other hazards that do not fall under classification:

This section provides applicable additional hazard information that does not affect the classification but may affect the overall hazard of the substance or mixture.

SECTION 3. Composition / information on ingredients

Ingredient(s) of the product: Mixture

Hazardous components in accordance with EEC Directive 67/548 and the Regulation on the classification, labeling, and packaging of substances and preparations, along with the associated classification.

Substance name	CAS NO.	Purity	Mixture	Concentration	Component proportion
7,7,9-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate	41137-60-4	√	/	100%	45%
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5	√	/	100%	30%
(5-ethyl-1,3-dioxan-5-yl)methyl acrylate	66492-51-1	√	/	100%	20%
Ethyl phenyl (2,4,6-trimethylbenzoyl) phosphinate	84434-11-7	√	/	100%	5%

SECTION 4. First Aid Measures

General advice:

Immediately consult a physician and present the safety data sheet to the attending medical professional. Replace any soiled or saturated clothing.

4.1 Following inhalation:

Keep victim calm, move to fresh air, and consult a physician. Corticosteroid spray may be inhaled depending on the condition.

4.2 Following skin contact:

Take off contaminated clothing and shoes immediately. Wash immediately and thoroughly with plenty of water, apply a sterile bandage, and consult a dermatologist.

4.3 Following eye contact:

In case of contact may cause irritation, immediately flush eyes with plenty of water for at least 15 minutes, consult eye doctor. Call a physician immediately if eyes are hurt.

4.4 Following ingestion:

Wash your mouth immediately, then drink 200-300 ml of water and seek medical attention. Call a physician or poison control immediately.

4.5 Notes for physicians:

Symptoms: The most important known symptoms and effects are described in section2/section11.

Hazards: There is no hazards in the intended use and when done properly.

Treatments: Symptomatic treatment (removal of dirt, pay attention to vital signs), no specific antidotes.

SECTION 5. Firefighting measures

5.1 Hazardous Characteristics:

No fire hazard.

5.2 Extinguishing Media:

Dry powder, chemical foam, carbon dioxide, water mist

5.3 Firefighting procedures:

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.

Fight fires at a safe distance and with adequate protection.

Take all precautions to avoid mixing with combustibles.

5.4 Hazardous combustion products:

Carbon monoxide, organic volatiles

5.5 Equipment:

Standard firefighting attire includes open-circuit compressed air breathing apparatus (EN 137), flame-retardant overalls (EN 469), flame-retardant gloves (EN 659), and firefighter boots (HO A29/A30).

SECTION 6. Accidental release measures

6.1 Personal precautions:

Wear appropriate protective measures (SEE SECTION 8).

6.2 Environmental precautions:

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

6.3 Cleaning method:

Remove by liquid absorbing material (e.g. kieselguhr,sand). Adhered or collected material should be promptly disposed of. Disposal of discarded waste/pollutants refers to SECTION 13,clean up with detergent and avoid solvents.

SECTION 7. Safe handling and storage

7.1 Handling Notes:

Keep indoor ventilation or local exhaust device. Keep away from heat sources/sparks/open flames/hot surfaces. Smoking is prohibited. Use only outdoors or in a well-ventilated area.

7.2 Storage Notes:

Separate from food and animal feed or do not store with incompatible substances (see Section 10.2).

Details on storage conditions: containers should be tightly sealed and stored in a dry, cool place. Since the product absorbs moisture from the air,keep the container dry.

Protect from heat. Protection against light effects. Stabilizers only work in the presence of aerobic conditions. Ensure adequate inhibitor and dissolved oxygen levels.

Prevent temperatures below:0°C

When the storage temperature is below the limit temperature for more than a certain period of time,the product performance can be changed.

Prevent temperatures above:40°C

Storage temperatures above the limit temperatures for a period of time,the product performance can be changed.

Recommendations: Adhere to all documentation supplied by the manufacturer.

SECTION 8. Exposure controls / personal protection

8.1 Occupational Exposure Limit:

No relevant data

8.2 Engineering Control:


Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Ensure that eyewash stations and safety showers are proximal to the work-station location.

8.3 Physical Safeguarding of the Body:

Utilize comprehensive protective attire that offers resistance to chemical substances. The selection of protective equipment should be based on the concentration and volume of the hazardous material present in the workplace. As a non-exhaustive qualitative example, consider wearing laboratory coats, chemical-resistant fabrics, and antistatic materials.

8.4 Personal Protection:

General requirement:	
Respiratory:	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Eyes:	Wear protective goggle (Conform to EC EN 166 or US-NIOSH).
Hands:	Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.

8.5 Sanitary Measure:

Forbid smoking, eating and drinking in working places. Washing hands after handling products.

SECTION 9. Physical and chemical properties

- **Appearance and Color:** Clear flowing liquid
- **Odour:** Slight odor
- **PH value:** 6.8-7.2
- **Flammability:** Noncombustible
- **Relative density (g/cm³):** 1.05g/cm³ (25°C)
- **Relative vapor density (g/L) (air = 1):** >1
- **Vapor pressure(MPa):** <0.01mmHg
- **Octanol/water partition coefficient:** No Data
- **Viscosity (mPa·s):** 120-180(mPa·s)(25°C)
- **Flash point(°C,Closed cup):** >250
- **Boiling point(°C):** 140
- **Melting/freezing point (°C):** -60
- **Evaporation rate (kg/s):** No Data
- **UEL% (V/V):** Not Applicable
- **LEL% (V/V):** Not Applicable
- **Auto-ignition temperature(°C):** >450
- **Decomposition temperature(°C):** >250
- **Solubility:** Slightly soluble in water, soluble in organic solvents such as benzene, alcohol, ether.

SECTION 10. Stability and reactivity

10.1 Stability:

Stable under recommended storage and handling conditions (See section 7).

10.2 Material for avoiding:

Strong oxide, acid and alkali, Strong reducing agent.

10.3 Contact conditions for avoiding:

Humidity, high temperature, sunlight.

10.4 Contact conditions for avoiding:

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

SECTION 11. Toxicological information

11.1 Acute toxicity:

Although no data of known appropriate health effects on humans or animals exist, this substance is expected to be mildly injurious in ingestion.

11.2 Skin corrosion/irritation:

Causes skin irritation.

11.3 Serious eye damage/irritation:

Exposure to products can cause severe eye irritation, with symptoms including severe pain, burning, tearing or swelling.

11.4 Respiratory or skin sensitization:

May cause skin allergic reaction.

11.5 Germ cell mutagenicity:

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

11.4 Respiratory or skin sensitization:

May cause skin allergic reaction.

11.5 Germ cell mutagenicity:

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

11.6 Carcinogenicity:

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

11.7 Reproductive toxicity:

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

11.8 STOT-single exposure:

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

11.9 STOT-repeated exposure:

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

11.10 Aspiration hazard:

Low volatility of the product under normal conditions of use. There are no symptoms that are harmful to health. Gas or vapor may be produced when the temperature is raised during the process. Causes irritation to the respiratory tract. Symptoms of respiratory irritation may include coughing, mucus secretion, and shortness of breath.

SECTION 12. Ecological information

12.1 Toxicity:

Aquatic toxicity evaluation: Harmful to aquatic life. Toxicity to aquatic life and has long lasting effects. Product untested. This statement is based on the properties of individual components.

12.2 Persistence and degradability:

No data available.

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil

No data available.

12.5 Other Dangers:

PBT and vPVB evaluation results: Not applicable

SECTION 13. Disposal considerations

13.1 Handling method for waste:

Handling waste according to the local regulations. Contact specific waste disposal company or companies recommended by local laws.

13.2 Handling method for uncleaned packaging

The packaging bottle must be emptied and then disposed of according to official regulations.

SECTION 14. Transport information

This is not classified as a hazardous/dangerous material under IATA, IMDG, DOT regulations.

- **Packaging Label:** None
- **UN NO:** UN 3082
- **Technical name:** None
- **Transport hazard class:** None
- **Subsidiary hazard class:** None
- **Packing group:** None

More information:

When the product is packaged in a capacity below 5L and satisfy Special Regulation 375 in ADR,RID,ADN,2.10.2.7 in IMDG,A197 in IATA,Special Regulation 99(2)in TDG,Section 171.4(c)(2)in 49 CFR and the requirements of Special Provision 375 in Appendix B of Chinese "Regulation concerning road transportation of dangerous goods-Part3:Index of dangerous goods name and transportation requirement"(JT/T617.3),it can be transported as ordinary goods,and it is not subject to other requirements related to the transport of dangerous goods.

SECTION 15. Regulatory information

This product is subject to the provisions of "Hazardous Chemical Safety Management Regulations", which refer to Section 14 of this SDS for classification of dangerous goods.

Other Regulations:

If regulatory information applicable to this product is not provided elsewhere in this safety technical note, it will be described in this section.

All substances are listed in IECSC. This safety technical specification is made according to "General rule for classification and hazard communication of chemicals" (if the product is applied to medicine). This product is subject to the provisions of "Drug Administration Law of the People's Republic of China" (if the product is applied to medicine), "the regulations on the Administration of Feed and Feed Additives" (if the product is applied to feed) and "Food Safety Law of the People's Republic of China" (if the product is applied to food).

Legislative and regulatory provisions concerning health, safety, and environmental standards specific to the substance or mixture.

This safety data sheet adheres to the stipulations of Regulation (EC) No. 1907/2006.

Substances that deplete the ozone layer (EC Regulation) No. 1005/2009 - Not applicable or exempt from Regulation.

Persistent Organic Pollutants (EC Regulation) No 850/2004 - Not applicable or exempt from Regulation.

Substances requiring authorization (Annex XIV of Regulation (EC) No 1907/2006) - Not applicable or exempt from Regulation.

Substances restricted for specific applications (Annex XVII to Regulation (EC) No 1907/2006) - Not applicable or not subject to regulation.

Montreal Protocol: Not listed.

Stockholm Convention: Not listed.

Rotterdam Convention: Not listed.

TSCA: All ingredients of the product are disclosed.

IECSC: All ingredients of the product are disclosed.

SECTION 16. Other information

Amendments to Prior Documents

Section 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16

Prepared by: RSPP Manager of Company

Any other use should be discussed with the manufacturer.

The information presented herein is based on our knowledge as of the date specified in the document and is deemed accurate. This information pertains solely to the indicated product and does not serve as a guarantee of specific qualities.

The details contained in this sheet relate to the product in the state and conditions in which it is supplied, considering its characteristics in relation to safety and storage requirements. This document should not be construed as a warranty of any particular property of the product. No liability is accepted for improper use. As the application of the product is beyond our direct control, the user is responsible for verifying the completeness of such information concerning the specific use necessitates the obligation to ensure the product's suitability for the intended application in terms of legal, hygienic, and safety standards. The user must possess technical expertise in their field and in material management, as well as receive adequate training in prevention, safety, and risk management. This document supersedes and replaces any prior editions. The brand displayed in the header and/or footer of this document may temporarily differ visually from that of the purchased product due to the ongoing transition of our brands.

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