

SAFETY DATA SHEET

according to 29 CFR 1910.1200 (OSHA HazCom 2012)

Issued on	Revision number	Revised on
10/22/2026	1	10/22/2026

1 Identification

Product identifier

Trade name: [3DBioCAD TRUCool]

Article number: [3DBioCAD 3DB1101]

Relevant identified uses / uses advised against: No further relevant information available.

Application of the substance / the preparation: For industrial use only. Metalworking fluid concentrate (coolant for dental CAD/CAM milling and grinding).

Details of the supplier of the safety data sheet

3DBioCAD
 1525 N 4th St
 Renton, WA 98057
 USA
 Phone: 425-227-4333
 E-mail: support@3dbiocad.com
 Website: www.3dbiocad.com

Information department: Product Support — support@3dbiocad.com

Emergency telephone number: For advice on chemical emergencies, spillages, fires or exposures: 425-227-4333

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

- **Skin Irrit. 2** — Causes skin irritation.
- **Eye Irrit. 2A** — Causes serious eye irritation.

Label elements

The product is classified and labeled according to 29 CFR 1910.1200 (OSHA HazCom 2012).

Hazard pictogram



GHS07

Signal word: Warning

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statements

P264	Wash thoroughly after handling.
P280	Wear protective gloves / eye protection.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards: None.

3 Composition/information on ingredients

Chemical characterization: Mixture of the substances listed below with nonhazardous additions. Mixture of nitrogen-containing organic acids (salts) and inhibitors.

Declarable components

CAS no.	Component	Concentration
102-71-6	Triethanolamine	>25 – <50%
—	Carboxylic acids, neutralized with alkanolamines*	>5 – 9.9%
—	Benzotriazole, sodium salt*	>1 – 2.9%
—	Carboxylic acids, alkali salts*	<2%

* Neutralization product: equilibrium of ion pairs.

The specific chemical identity and/or exact percentage concentration of proprietary components is withheld as a trade secret.

4 First-aid measures

Description of first aid measures

- **After inhalation:** In case of unconsciousness, place patient stably in side position for transportation. Not applicable, as the concentrate is not volatile.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist, consult a doctor.

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

Unsuitable extinguishing agents (for safety reasons): Water with full jet.

Special hazards arising from the substance or mixture: No further relevant information available.

Protective equipment for firefighters: No special measures required.

Additional information: Cool endangered receptacles with water spray.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures: Not required.

Environmental precautions: Do not allow to enter sewers, surface or ground water.

Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to Section 13.

Reference to other sections: See Section 7 for safe handling, Section 8 for personal protective equipment and Section 13 for disposal.

7 Handling and storage

Precautions for safe handling: The product has been classified and marked in accordance with directives on hazardous materials. Observe the general safety regulations when handling chemicals.

Protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

- **Storerooms and receptacles:** Store only in the original receptacle.
- **Common storage:** Do not store together with oxidizing and acidic materials.
- Protect from heat and direct sunlight.
- **Optimal storage temperature:** 5 °F to 104 °F (–15 °C to 40 °C).
- **Minimum shelf life:** At least 12 months in the closed, original container.

Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see Section 7.

Control parameters

NIOSH recommended exposure limit for metalworking fluids: 0.5 mg/m³ (particulate).

Component (CAS)	Limit type	Long-term value
Triethanolamine (102-71-6)	TLV (USA)	5 mg/m ³
Triethanolamine (102-71-6)	EL (Canada)	5 mg/m ³
Triethanolamine (102-71-6)	EV (Canada)	3.1 mg/m ³ , 0.5 ppm

The lists valid at the time of creation were used as the basis.

General protective and hygienic measures

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.

Personal protective equipment

- **Respiratory protection:** Not required.
- **Hand protection:** Protective gloves that are impermeable and resistant to the product. Recommended: nitrile gloves, minimum thickness 0.3 mm. Due to missing tests, no further glove material recommendation can be given; the exact breakthrough time must be obtained from the glove manufacturer and observed.
- **Eye protection:** Eye protector with side protection (framed eyeglasses), ANSI Z87.1-2010. Use of tight-fitting goggles.
- **Body protection:** Protective work clothing.

9 Physical and chemical properties

Property	Value	Method
Form	Fluid	
Color	Yellowish	
Odor	Pleasant	
Odor threshold	Not determined	
pH value	8.7 – 9.4 @ 5% in H ₂ O	DIN 51369 / ASTM D1287
Melting point / range	Not applicable	
Boiling point / range	>100 °C (>212 °F)	DIN 51751 / ASTM D86
Flash point	>120 °C (>248 °F); not applicable (contains water)	ISO 2592 / ASTM D92
Evaporation rate	Not determined	
Flammability (solid, gaseous)	Not applicable	
Explosion limits, lower / upper (@1013 mbar)	Not determined	
Oxidizing properties	Not applicable	
Relative density	1.105 @ 68 °F (20 °C)	DIN 51757 / ASTM D1217
Vapor density	Not applicable / not determined	
Solubility in / miscibility with water	Fully miscible	
Partition coefficient (n-octanol/water)	Not determined	
Auto-ignition temperature	Product is not self-igniting	
Decomposition temperature	Not determined	
Kinematic viscosity at 40 °C (104 °F)	10.3 mm ² /s	ISO 3104 / ASTM D445
VOC content — concentrate as sold	30 g/L	ASTM E1868-10
VOC content — at maximum concentration 5%	1.5 g/L	ASTM E1868-10

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Other information: None. No further relevant information available.

10 Stability and reactivity

Reactivity: None known if used as directed.

Chemical stability: Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: Reacts with strong acids and oxidizing agents.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products (in case of fire or oxidation): Carbon monoxide, carbon dioxide, nitrogen oxides (NOx).

11 Toxicological information

Acute toxicity — LD/LC50 values relevant for classification

Substance	Route	Value
Product (ATE, Acute Toxicity Estimate)	Oral LD50	6,707 mg/kg
Product (ATE, Acute Toxicity Estimate)	Dermal LD50	>3,171 mg/kg
Product (ATE, Acute Toxicity Estimate)	Inhalative LD50	451 mg/L
Carboxylic acids, neutralized with alkanolamines*	Oral LD50 (rat)	1,089 mg/kg
Carboxylic acids, neutralized with alkanolamines*	Inhalative LD50	42 mg/L

* Pure substance; neutralization product (see Section 3).

Primary irritant effect

- **On the skin:** Causes skin irritation.
- **On the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations: Irritant.

IARC (International Agency for Research on Cancer)	None of the ingredients is listed in groups 1, 2A or 2B.
NTP (National Toxicology Program)	None of the ingredients is listed.

12 Ecological information

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

General notes: Do not allow product to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment: PBT: Not applicable. vPvB: Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal considerations

Waste treatment methods: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Used containers: Disposal must be made according to official regulations.

14 Transport information

Item	DOT, IMDG, IATA
UN number	Not regulated
UN proper shipping name	Not regulated

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Item	DOT, IMDG, IATA
Transport hazard class	Not regulated
Packing group	Not regulated
Environmental hazards	Not applicable
Special precautions for user	Not applicable
UN "Model Regulation"	Not regulated

Not hazardous according to the above specifications. IATA: Dangerous Goods Regulations (DGR), latest edition.

15 Regulatory information

Regulation	Status
SARA Section 355 (extremely hazardous substances)	None of the ingredients is listed.
SARA Section 313 (specific toxic chemical listings)	This product does not contain a chemical listed in Section 313.
TSCA (Toxic Substances Control Act)	All ingredients are listed on the U.S. TSCA inventory or exempt from premanufacture notice requirements.
EPA (carcinogenic categories)	None of the ingredients is listed.
NIOSH carcinogen list	None of the ingredients is listed.
California SCAQMD Rule 1144	Category: Metalworking Fluid – Metal Forming – General. Recordkeeping requirement: Super Compliant (<50 g/L VOC at maximum use concentration).

California Proposition 65: This product contains one or more chemicals listed under California Proposition 65. Such chemicals are not used as raw materials in the product formulation but are typical impurities.

GHS label elements: See Section 2.

16 Other information

This information is based on our present knowledge. It does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

NFPA ratings (scale 0–4)

Health	Fire	Reactivity
1	1	0

Hazards of the dilution with water (intended use): For the product diluted to 5% concentration in water (maximum recommended concentration), no GHS pictograms, signal words, hazard or precautionary statements apply.

H.R.2420 (RoHS): EDEE Act regulated materials are absent or their concentrations are significantly below regulatory thresholds.

BSE/TSE: Materials and/or synthetically modified materials of animal origin from bovine, ovine, goats, cats, dogs, deer, elk and/or mink are NOT included in this product.

Department issuing SDS: 3DBioCAD Product Support — support@3dbiocad.com

Revision history: Revision 1, 10/22/2026 — first issue.

Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists
 ATE: Acute Toxicity Estimate
 CAS: Chemical Abstracts Service
 DOT: US Department of Transportation
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 IATA: International Air Transport Association
 IMDG: International Maritime Code for Dangerous Goods
 ISO: International Organization for Standardization
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 NIOSH: National Institute for Occupational Safety and Health

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OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic chemicals

RoHS: Restriction of Hazardous Substances

VOC: Volatile Organic Compounds

vPvB: very Persistent and very Bioaccumulative chemicals

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A