

SAFETY DATA SHEET



Jotun Protects Property

Jotafloor PU Crete Comp D

Section 1. Identification

Product identifier	: Jotafloor PU Crete Comp D
Product code	: 38345
Other means of identification	: Not available.
Product type	: Liquid.
Product description	: Paint.

Recommended use of the chemical and restrictions on use

Identified uses

Use in coatings - Professional use

Restrictions on use

Not applicable.

Supplier's details	: Jotun Saudia Co Ltd. P.O. Box 34698 Jeddah 21478 Kingdom of Saudi Arabia Tel: +966 2 6350535 Fax: +966 2 6362483 SDSJotun@jotun.com
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Emergency telephone number	: Jotun AS, Norway +47 33 45 70 00
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Section 2. Hazard identification

Classification of the substance or mixture	: SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
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GHS label elements

Hazard pictograms

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Signal word	: Warning.
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Hazard statements	: H400 - Very toxic to aquatic life. H411 - Toxic to aquatic life with long lasting effects.
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Precautionary statements

General	: Not applicable.
Prevention	: P273 - Avoid release to the environment.
Response	: P391 - Collect spillage.
Storage	: Not applicable.

Section 2. Hazard identification

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

Ingredient name	%	Identifiers
Frits, chemicals	≤3	CAS: 65997-18-4
copper oxide	≤1	CAS: 1317-38-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
titanium dioxide	NIOSH REL (United States, 10/2020) NIA. CAL OSHA PEL (United States, 1/2025) TWA 8 hours: 5 mg/m ³ (as Ti). Form: respirable fraction. TWA 8 hours: 10 mg/m ³ (as Ti). Form: total dust. OSHA PEL (United States, 5/2018) TWA 8 hours: 15 mg/m ³ . Form: Total dust. OSHA PEL 1989 (United States, 3/1989) TWA 8 hours: 10 mg/m ³ . Form: Total dust. ACGIH TLV (United States, 1/2025) A3. TWA 8 hours: 2.5 mg/m ³ . Form: respirable fraction, finescale particles.
iron oxide (fe3o4)	OSHA PEL (United States, 5/2018) [Iron oxide fume] TWA 8 hours: 10 mg/m ³ . Form: Fume.
copper oxide	NIOSH REL (United States, 10/2020) [COPPER FUME] TWA 10 hours: 0.1 mg/m ³ (as Cu). Form: Fume. CAL OSHA PEL (United States, 1/2025) [copper salts] TWA 8 hours: 1 mg/m ³ (as Cu). Form: dust and mist. OSHA PEL 1989 (United States, 3/1989) [Copper Fume (as Cu)] TWA 8 hours: 0.1 mg/m ³ (as Cu). Form: Fume. ACGIH TLV (United States, 1/2025) [copper fume] TWA 8 hours: 0.2 mg/m ³ . Form: Fume.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Section 8. Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Colour : Green., Grey, Red

Odour : Characteristic.

Odour threshold : Not applicable.

pH : Not applicable.

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling range : Not available.

Flash point : Closed cup: 229°C (444.2°F)

Evaporation rate : Not available.

Flammability : Not available.

Lower and upper explosion limit/flammability limit : Not available.

Vapour pressure : Not available.

Section 9. Physical and chemical properties and safety characteristics

Relative vapour density : Not available.
Relative density : Not available.
Density : 1.051 to 1.148991 g/cm³
Solubility(ies) :

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water : Not available.
Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
castor oil	448	838.4	

Decomposition temperature : Not available.
Viscosity : Dynamic (room temperature): Not available.
 Kinematic (room temperature): Not available.
 Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
copper oxide	Rat - Oral - LD50 470 mg/kg

Conclusion/Summary[Product] : Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary[Product] : Not available.

Section 11. Toxicological information

Serious eye damage/eye irritation

Not available.

Conclusion/Summary[Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary[Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary[Product] : Not available.

Respiratory

Conclusion/Summary[Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary[Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary[Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary[Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

Not available.

Potential acute health effects

Section 11. Toxicological information

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Long term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Potential chronic health effects

Not available.

Conclusion/Summary[Product] : Not available.

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Product/ingredient name

copper oxide

Result

Acute - LC50 - Fresh water

Daphnia - Water flea - *Daphnia magna* - Neonate
2.6 mg/l [48 hours]
Effect: Intoxication

Chronic - NOEC - Fresh water

Algae - Green algae - *Pseudokirchneriella subcapitata* -
Exponential growth phase
0.421 mg/l [72 hours]
Effect: Growth

Acute - EC50 - Fresh water

Algae - Green algae - *Pseudokirchneriella subcapitata* -

Section 12. Ecological information

Exponential growth phase

0.014 mg/l [72 hours]

Effect: Growth

Acute - LC50 - Fresh waterFish - Western mosquitofish - *Gambusia affinis* - Adult

56000 ppm [96 hours]

Effect: Mortality

Conclusion/Summary[Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary[Product] : Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Frits, chemicals	-	5613	High

Mobility in soil

Soil/water partition coefficient : Not available.

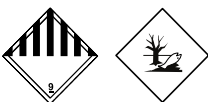
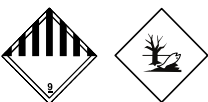
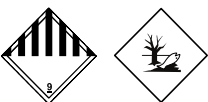
Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN3082	UN3082	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (copper oxide)	Environmentally hazardous substance, liquid, n.o.s. (copper oxide). Marine pollutant (copper oxide)	Environmentally hazardous substance, liquid, n.o.s. (copper oxide)
Transport hazard class(es)	9 	9 	9 

Section 14. Transport information

Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.

Additional information

- UN** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Emergency schedules F-A, S-F
 Segregation Group: Not Applicable
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
- ADR/RID** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Hazard identification number 90
Tunnel code (-)

- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

- Transport in bulk according to IMO instruments** : Not available.

Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

History

- Date of printing** : 16.07.2026
- Date of issue/Date of revision** : 16.07.2026
- Date of previous issue** : No previous validation
- Version** : 1

Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 IMO = International Maritime Organization
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 N/A = Not available
 SGG = Segregation Group
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1	Calculation method
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2	Calculation method

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the data given without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.