SAFETY DATA SHEET

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Section 1. Identification

GHS product identifier	:Õ æ∙ÁØæà¦a&
Product code	: Not available.
Other means of identification	: Not available.
Product type	: Solid.
Relevant identified uses of t	he substance or mixture and uses advised against
Product use	: Glass fibres
Area of application	: Professional applications.
Supplier/Manufacturer	: ÙŒDÜVÒÝ WٌʊŠÔ FGG€€T ŒP[^ËP`} ơ\•çậ ^ ÜåÈ Ù`ã^ Œ P`} ơ\•çậ ^ÈÞÔ GÌ €Ï Ì (WÙŒ) Tel +F ·Ï€I ·IÎI Í JJÌ Fax +F ·Ï€I ·IÎI Í JGG T æậMagi -{O •æ\d¢È&[{ Website: www.•æ\d¢¢.com
e-mail address of person responsible for this SDS	: ∄-{O&@{ \$&\$##B&@&\Èa^LÁÈ&@`¦à`•&@O&@{ \$&##B&@&\Èa^</th></tr><tr><th>Emergency telephone number (with hours of operation)</th><th>: ÉFÂ, Î GÂ, Ì Ì Ì GÎ FÁÇÛŒÜD</th></tr></tbody></table>

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the	: Not classified.
substance or mixture	
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

Date of issue/Date of revision

Date of previous issue : No

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

Ingredient name	Other names	%	CAS number
titanium dioxide	-	≤1	13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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. Get medical attention if symptoms occur.
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. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effe	cts
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.
<u>Over-exposure signs/sym</u>	<u>otoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate me	dical 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)

Date of issu	e/Date of	' revision
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Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: In case of fire, use water spray (fog), foam, dry chemical or CO ₂ .
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide 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 spilled material. Put on appropriate personal protective equipment.	
For emergency responders	:	If specialized 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 spilled 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).	
Methods and materials for co	nta	ainment and cleaning up	
Small spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.	
Large spill	:	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8).

Date of issue/Date of revision

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 between the following temperatures: 20 to 25°C (68 to 77°F). 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 unlabeled 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	OSHA PEL (United States, 5/2018). TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2022). TWA: 2.5 mg/m ³ 8 hours. Form: respirable fraction, finescale particles

Good general ventilation should be sufficient to control worker exposure to airborn contaminants.	е
Emissions from ventilation or work process equipment should be checked to ensur they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipme will be necessary to reduce emissions to acceptable levels.	Э
Wash hands, forearms and face thoroughly after handling chemical products, beforeating, 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 satisfies showers are close to the workstation location.	g.
Safety eyewear complying with an approved standard 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, unlet the assessment indicates a higher degree of protection: safety glasses with side-shields.	,
Chemical-resistant, impervious gloves complying with an approved standard shoul worn at all times when handling chemical products if a risk assessment indicates the necessary. 4 - 8 hours (breakthrough time): Protective/insulated gloves. If applical Rubber gloves. Butyl gloves. Neoprene gloves./ polychloroprene gloves. Nitrile glove (>=0.5 mm) Recommended: Protective hand cream	his is ble
: res :	 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 equipme will be necessary to reduce emissions to acceptable levels. 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 satishowers are close to the workstation location. Safety eyewear complying with an approved standard 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, unlet the assessment indicates a higher degree of protection: safety glasses with side-shields. Chemical-resistant, impervious gloves complying with an approved standard should worn at all times when handling chemical products if a risk assessment indicates to react the protective/insulated gloves. If applical Rubber gloves. Butyl gloves. Neoprene gloves./ polychloroprene gloves. Nitrile glov (>=0.5 mm)

Section 8. Exposure controls/personal protection

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

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

Appearance							
Physical state	1	Solid.					
Color	1	According to specification	According to specification				
Odor	:	Characteristic.	Characteristic.				
Odor threshold	:	Not available.					
рН	1	Not available.	lot available.				
Melting point/freezing point	1	Not available.	Not available.				
Boiling point, initial boiling point, and boiling range	:	Not available.					
Flash point	1	Not applicable.					
Evaporation rate	4	Not available.	Not available.				
Flammability		Not available.	Not available.				
Lower and upper explosion limit/flammability limit	:	Not applicable.					
Vapor pressure	4	Not applicable.	Not applicable.				
Relative vapor density	4	Not applicable.					
Relative density	4	Not available.					
Density	4	Not available.					
Solubility(ies)	4	Media	Result				
		hot water cold water	Not soluble Not soluble				
Miscible with water	1	No.					
Partition coefficient: n- octanol/water	:	Not applicable.					
Auto-ignition temperature	1	Not applicable.					
Decomposition temperature	4	Not available.					
SADT	1	Not available.					
Viscosity	1	Not applicable.					
Flow time (ISO 2431)	1	Not available.					
Particle characteristics							
Median particle size		Not available.					
Other information							

Date of issue/Date of revision

Section 9. Physical and chemical properties

Physical/chemical properties comments

: No additional information.

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. Under normal conditions of storage and use, hazardous polymerization 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	Species	Dose	Exposure
titanium dioxide	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.09 mg/l	4 hours

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300	-
				ug l	

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	C	OSHA	IARC	NTF	0			
titanium dioxide	-		2B	-				
Reproductive toxicity]
Conclusion/Summary	: Not	available	9.					
<u>Feratogenicity</u>								
Conclusion/Summary	: Not	available	9.					
ate of issue/Date of revision	: 11/	/29/2022	Date of previous issue		No previous validation	Version	:1	6/11

Section 11. Toxicological information

Specific target organ toxicit Not available.	t <u>y (single exposure)</u>
Specific target organ toxicit Not available.	t <u>y (repeated exposure)</u>
Aspiration hazard Not available.	
Information on the likely routes of exposure	: Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Potential acute health effects	<u>5</u>
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 phy	vsical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
	ts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
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

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	(gases)	(vapors)	Inhalation (dusts and mists) (mg/ I)
titanium dioxide	N/A	N/A	N/A	N/A	5.09

Date of issue/Date of revision

: 11/29/2022 Date of previous issue

ssue : No previous validation

Version : 1

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours
Conclusion/Summary	: Not available.		

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Date of issue/Date of r	revision : 11/29/2022 Date	of previous issue : No previous val	idation Version : 1 8/11

 Oper-Administ

 Section 14. Transport information

 Packing group

 Environmental hazards
 No.
 No.
 No.

Additional information

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 : Not available. to IMO instruments

Section 15. Regulatory information

U.S. Federal regulations	: т	SCA 8(a) CDR Exe	mpt/Partial exemption: Not determined		
	Ur	nited States inven	tory (TSCA 8b): Not determined.		
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Lis	sted			
Clean Air Act Section 602 Class I Substances	: No	ot listed			
Clean Air Act Section 602 Class II Substances	: No	ot listed			
DEA List I Chemicals (Precursor Chemicals)	: No	ot listed			
DEA List II Chemicals (Essential Chemicals)	: No	ot listed			
<u>SARA 302/304</u>					
Composition/information of	on ing	<u>redients</u>			
No products were found.					
SARA 304 RQ	: No	ot applicable.			
<u>SARA 311/312</u>					
Classification	on : Not applicable.				
Composition/information of	on ing	<u>redients</u>			
Name		%	Classification		
titanium dioxide		≤1	CARCINOGENICITY - Category 2		
SARA 313		·	•		
Not applicable.					
State regulations					
Massachusetts	: Th	ne following compor	nents are listed: FIBROUS GLASS		
New York	: None of the components are listed.				
New Jersey	: None of the components are listed.				
Pennsylvania	: None of the components are listed.				
<u>California Prop. 65</u>					

Date of issue/Date of revision

Section 15. Regulatory information

WARNING: This product can expose you to Titanium dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name		Maximum acceptable dosage level
Titanium dioxide	-	-

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

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Classification			Justification		
Not classified.					
History			ł		
Date of issue/Date of revision	: 11/29/2022				
Date of previous issue	: No previous	validation			
Date of issue/Date of revision	: 11/29/2022	Date of previous issue	: No previous validation	Version : 1	10/11

Section 16. Other information

Version	: 1
Prepared by	: Chemical Check GmbH
Key to abbreviations	 ATE = Acute Toxicity Estimate AMP = Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods 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 UN = United Nations
References	: HCS (U.S.A.)- Hazard Communication Standard International transport regulations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.