

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

AQUASTOP NANOSIL

Date of first edition: 2/3/2023

Safety Data Sheet dated 2/3/2023

version 7

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

1.1. Product identifier

Mixture identification:

Trade name: AQUASTOP NANOSIL

Trade code: K50030

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

Recommended use: Adhesives, sealants

Uses advised against: All uses other than recommended ones

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL France

25, avenue de l'Industrie - 69960 Corbas - France

Tel. +33 472 890 684

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Kerakoll Italy - +39-0536-816511

Ireland

Poison information centre: 01 809 2166 (Daily 8am-10pm)

In case of emergency call 999 or 112

Malta

In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

0 The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

DECL10 This titanium dioxide-containing product is not classified as carcinogen by inhalation because it does not meet the criteria stated in Note 10, Annex VI of Regulation (EC) 1272/2008.

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \mu\text{m}$.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Special Provisions:

EUH208 Contains Trimethoxyvinilsilane. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: AQUASTOP NANOSIL

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
1-2,4 %	A mixture of: isomers of 2-(2H-benzotriazol-2-yl)-4-methyl-(n)-dodecylphenol; isomers of 2-(2H-benzotriazol-2-yl)-4-methyl-(n)-tetracosylphenol; isomers of 2-(2H-benzotriazol-2-yl)-4-methyl-5,6-didodecyl-phenol. n=5 or 6	CAS:125304-04-3	Aquatic Chronic 4, H413	
1-2,4 %	titanium dioxide	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351	
< 1 %	Trimethoxyvinilsilane	CAS:2768-02-7 EC:220-449-8 Index:014-049-00-0	Skin Sens. 1B, H317; Flam. Liq. 2, H225; Acute Tox. 4, H332	01-2119513215-52

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

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

4.2. Most important symptoms and effects, both acute and delayed

N.A.

4.3. Indication of any immediate medical attention and special treatment needed

N.A.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

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

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Notes
Limestone	NATIONAL	BELGIUM		10.000				
	NATIONAL	HUNGARY		10.000				
	NATIONAL	SPAIN		10.000				Inhalable aerosol
	NATIONAL	SWITZERLAND		3.000				Respirable aerosol
	NATIONAL	UNITED STATES OF AMERICA		15.000				OSHA: Total dust
	NATIONAL	UNITED STATES OF AMERICA		5.000				OSHA: Respirable dust
	NATIONAL	UNITED STATES OF AMERICA		10.000				NIOSH: total dust
	NATIONAL	UNITED STATES OF AMERICA		5.000				NIOSH: Respirable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		10.000				Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		4.000				Respirable aerosol
	NATIONAL	CROATIA		10.000				

	NATIONAL FRANCE	10.000	
	NATIONAL NETHERLANDS	10.000	
	NATIONAL PORTUGAL	10.000	
titanium dioxide	NATIONAL AUSTRALIA	10	
	NATIONAL BELGIUM	10.000	
	NATIONAL CANADA	10.000	Ontario
	NATIONAL CANADA	10.000	Quebec
	NATIONAL DENMARK	6.000	12.000
			Long term and short term: total dust
	NATIONAL FRANCE	11.000	Inhalable aerosol
	NATIONAL GERMANY	0.300	2.400
			DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density;
	NATIONAL IRELAND	10.000	Inhalable fraction
	NATIONAL IRELAND	8.000	Respirable fraction
	NATIONAL LATVIA	10.000	
	NATIONAL NEW ZEALAND	10000.000	The value for inhalable dust containing no asbestos and less than 1% free silica
	NATIONAL CHINA	8.000	Inhalable fraction
	NATIONAL POLAND	10.000	30.000
	NATIONAL ROMANIA	10.000	15.000
	NATIONAL SINGAPORE	10.000	
	NATIONAL KOREA, REPUBLIC OF	10.000	
	NATIONAL SPAIN	10.000	Inhalable aerosol
	NATIONAL SWEDEN	5.000	Inhalable aerosol
	NATIONAL SWITZERLAND	3.000	Respirable aerosol
	NATIONAL UNITED STATES OF AMERICA	15.000	OSHA; total dust
	NATIONAL UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000	Inhalable aerosol
	NATIONAL UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000	Respirable aerosol
	NATIONAL ARGENTINA	10.000	
	NATIONAL AUSTRIA	5.000	10.000
	NATIONAL BULGARIA	10.000	
	NATIONAL CROATIA	10.000	total dust
	NATIONAL CROATIA	4.000	respirable dust
	NATIONAL GREECE	10.000	
	NATIONAL GREECE	50.000	
	NATIONAL GREECE	5.000	
	NATIONAL INDONESIA	10.000	

NATIONAL	LITHUANIA	5.000			
NATIONAL	NORWAY	5.000			
NATIONAL	PORTUGAL	10.000			
NATIONAL	RUSSIAN FEDERATION	10.000			
NATIONAL	SLOVAKIA	5.000			
NATIONAL	SLOVENIA	6.000			
NATIONAL	SOUTH SUDAN	10.000			Inhalable fraction
NATIONAL	SOUTH SUDAN	5.000			Respirable fraction
NATIONAL	TAIWAN, PROVINCE OF CHINA	10.000			
ACGIH	NNN	10.000			A4 - LRT irr
Trimethoxyvinilsilane	NATIONAL CANADA		60.000	10.000	Ontario

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
titanium dioxide	13463-67-7	0.184 mg/l	Freshwater	
		0.018 mg/l	Marine water	
		1.000 mg/kg	Intermittent releases (freshwater)	
		100.000 mg/kg	Intermittent releases (marine water)	
		100.000 mg/kg	Microorganisms in sewage treatments	
Trimethoxyvinilsilane	2768-02-7	400.000 µg/l	Freshwater	
		2.400 mg/l	Intermittent releases (freshwater)	
		40.000 µg/l	Marine water	
		6.600 mg/l	Microorganisms in sewage treatments	
		1.500 mg/kg	Freshwater sediments	
		150.000 µg/kg	Marine water sediments	
		60.000 µg/kg	Soil	

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
titanium dioxide	13463-67-7		10.000 mg/m ³		Human Inhalation	Long Term, local effects
Trimethoxyvinilsilane	2768-02-7		27.600 mg/m ³	6.700 mg/m ³	Human Inhalation	Long Term, systemic effects
			260.000 mg/m ³	50.000 mg/m ³	Human Inhalation	Short Term, systemic effects
			3.900 mg/kg	7.800 mg/kg	Human Dermal	Short Term, systemic effects
				300.000 µg/kg	Human Oral	Long Term, systemic effects

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

N.A.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Liquid

Color: In compliance with the product description

Odour: Odourless

Odour threshold: N.A.

pH: N.A.

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: > 60°C / 93°C

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.60 kg/m³ Notes @20°C

Solubility in water: N.A.

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 0 % ; 0 g/l

Particle characteristics:

Particle size: N.A.

9.2. Other information

Miscibility: N.A.

Conductivity: N.A.

Evaporation rate: N.A. No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified
	Based on available data, the classification criteria are not met

c) serious eye damage/irritation	Not classified	Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	Not classified	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

titanium dioxide	a) acute toxicity	LD50 Oral Rat > 5000.00 mg/kg
		LC50 Inhalation > 6.82 mg/l
	d) respiratory or skin sensitisation	Skin Sensitization Negative
	i) STOT-repeated exposure	No Observed Adverse Effect Level 1000.00
Trimethoxyvinilsilane	a) acute toxicity	LD50 Oral Rat = 7.34000 ml/Kg
		LC50 Inhalation Vapour Rat = 2773.00000 Ppm 4h
		LD50 Skin Rabbit = 3.36000 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 24h
	c) serious eye damage/irritation	Eye Irritant Rabbit No 24h
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Positive
	f) carcinogenicity	Genotoxicity Rat Negative
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 250.00000 mg/kg
		Inhalation route

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
titanium dioxide	CAS: 13463-67-7 - EINECS: 236-675-5 - INDEX: 022-006-00-2	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas (Cavedano americano) > 1000.00 mg/L 96h

a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata (alghe

Trimethoxyvinilsilane	CAS: 2768-02-7 - EINECS: 220-449-8 - INDEX: 014-049-00-0	cloroficee) > 100.00 mg/L 72h a) Aquatic acute toxicity : NOEC Algae = 5600.00 mg/L a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna (Pulce d'acqua grande) > 100.00 mg/L 48h a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 137.00000 mg/L 96h a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 121.00000 mg/L 48h b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 20.00000 mg/L - 21days a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata > 89.00000 mg/L 72h a) Aquatic acute toxicity : EC10 microorganisms > 100.00000 mg/L 3h OECD 209
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12.2. Persistence and degradability

Component	Persistence/Degradability:
Trimethoxyvinilsilane	Readily biodegradable

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7 Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

N.A.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N.A.

14.2. UN proper shipping name

ADR-Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

N.A.

14.3. Transport hazard class(es)

N.A.

IATA-Class: N/A

IMDG-Class: N/A

14.4. Packing group

N.A.

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5. Environmental hazards

N.A.

IMDG-EMS: N/A

14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID) :

ADR-Label: N.A. N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Air (IATA) :

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisioning: N/A

N.A.

Sea (IMDG) :

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisioning: N/A

N.A.

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None

Restrictions related to the substances contained: 40, 75

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

Regulation (EU) 649/2012 (PIC regulation):

No Substance Listed

German Water Hazard Class.

NWG: Not hazardous for water

SVHC Substances:

No data available

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description	
H225	Highly flammable liquid and vapour.	
H317	May cause an allergic skin reaction.	
H332	Harmful if inhaled.	
H351	Suspected of causing cancer if inhaled.	
H413	May cause long lasting harmful effects to aquatic life.	
Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.6/2	Carc. 2	Carcinogenicity, Category 2
4.1/C4	Aquatic Chronic 4	Chronic (long term) aquatic hazard, category 4

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: Keep Away From Heat

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

Exposure Scenario

Trimethoxyvinilsilane

Exposure Scenario, 08/06/2021

Substance identity	
	Trimethoxyvinilsilane
CAS No.	2768-02-7
INDEX No.	014-049-00-0
EINECS No.	220-449-8
Registration number	01-2119513215-52

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1. ES 1

1. ES 1

1.1 TITLE SECTION

Exposure Scenario name	Use in rigid foams, coatings, adhesives and sealants - Barrier (Sealant)
Date - Version	18/05/2021 - 1.0
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22) - Building and construction work (SU19)
Product Categories	Adhesives, sealants (PC1)

Environment Contributing Scenario

CS1 Low environmental release	ERC8c - ERC8f
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Worker Contributing Scenario

CS2 Wiping - Hand application - finger paints, pastels, adhesives - Preparation of material for application	PROC0
CS3 Wiping - Hand application - finger paints, pastels, adhesives - Preparation of material for application	PROC1

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario: Low environmental release (ERC8c, ERC8f)

Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8c, ERC8f)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Concentration after dilution for use maximum [%]: 0.7 %

Amount used, frequency and duration of use (or from service life)

Amounts used:

Daily amount per site = 0.28 kg/day

Release type:

Continuous release

Emission days:

365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Water - minimum efficiency of: 1.5 %

Conditions and measures related to sewage treatment plant

STP type:

Onsite Sewage Treatment Plant

Water - minimum efficiency of: = 0.013 %

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

Dispose of waste product or used containers according to local regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor:

100

Local freshwater dilution factor:

10

Receiving surface water flow:

20000 m³/day

Covers indoor and outdoor use

1.2. CS2: Worker Contributing Scenario: Wiping - Hand application - finger paints, pastels, adhesives - Preparation of material for application (PROC0)

Process Categories	Other (PROC0)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 0.7 %

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration <= 6 h

Frequency:

Use frequency = 250 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

For further specification, refer to section 8 of the SDS.

Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Room size: Covers use in room size of = 20 m³

Temperature: Covers use at ambient temperatures. 25°C

1.2. CS3: Worker Contributing Scenario: Wiping - Hand application - finger paints, pastels, adhesives - Preparation of material for application (PROC1)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration = 8 h

Frequency:

Use frequency = 1 days per year

Duration:

Covers use up to = 6 h

Frequency:

Use frequency = 1 days per year

Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Room size: Covers use in room size of = 20 m³

Ventilation rate: = 0.6 ach (air changes per hour)

1.3 Exposure estimation and reference to its source

1.3. CS2: Worker Contributing Scenario: Wiping - Hand application - finger paints, pastels, adhesives - Preparation of material for application (PROC0)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 1.9 mg/m ³	N/A	= 0.069
dermal, long-term	= 4.53 mg/kg bw/day	ConsExpo	= 0.038
combined routes, long-term	N/A	N/A	0.107

1.3. CS3: Worker Contributing Scenario: Wiping - Hand application - finger paints, pastels, adhesives - Preparation of material for application (PROC1)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 4.57 mg/m ³	N/A	= 0.682
dermal, long-term	= 0.044 mg/kg bw/day	ConsExpo	< 0.01
combined routes, short-term	N/A	N/A	0.682

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.