according to UK REACH Regulation

Tikalflex Contact 12 / Clear 10

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

1.1. Product identifier

Tikalflex Contact 12 / Clear 10

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

Use of the substance/mixture

adhesive

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: Tikal Marine Systems GmbH

Street: Werkstraße 6

Place: D-22844 Norderstedt

Telephone: +49 40 526 30 60 3 Telefax: +49 40 526 30 60 5

e-mail: info@tikal-online.de
Internet: www.tikal-online.com

1.4. Emergency telephone Tikal Marine Systems GmbH +49 40 526 30 60 3

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

GB CLP Regulation

Special labelling of certain mixtures

EUH208 Contains bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	GHS Classification				
2768-02-7	trimethoxyvinylsilane; trimethoxy(vinyl)silane				
	220-449-8		01-2119513215-52		
	Flam. Liq. 3, Acute Tox. 4; H226 H332				
198028-14-7	Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- and N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and Decanamide, N,N'-1,2-ethanediylbis-			1 - 2,5 %	
	907-495-0		01-2119545465-35		
	Aquatic Chronic 3; H412				
41556-26-7	bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate			0,1 - 0,25 %	
	255-437-1				

according to UK REACH Regulation

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	Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H317 H400 H410	
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Full text of H and EUH statements: see section 16.

Specific Conc. Limits. M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
2768-02-7	220-449-8	trimethoxyvinylsilane; trimethoxy(vinyl)silane	3 - 10 % %
	1	50 = 16,8 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ng/kg; oral: LD50 = 6,899 mg/kg	
198028-14-7	907-495-0	Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- and N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and Decanamide, N,N'-1,2-ethanediylbis-	
	inhalation: LC5	50 = 5,11 mg/l (dusts or mists); dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000	

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated, saturated clothing immediately.

After inhalation

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

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

No information available.

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

Provide fresh air.

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam.

Unsuitable extinguishing media

Water spray. High power water jet. Water.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

according to UK REACH Regulation

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Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Safe handling: see section 7

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal. Avoid dust formation. Clear contaminated areas thoroughly.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.)

Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Further information on handling

General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.

Recommended storage temperature: 20°C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

according to UK REACH Regulation

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
198028-14-7	Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-ox N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and					
Worker DNEL	, long-term	inhalation	systemic	3 mg/m³		
Worker DNEL	, long-term	inhalation	local	3 mg/m³		
Worker DNEL	, acute	inhalation	local	3 mg/m³		
Worker DNEL, long-term		dermal	local	3,75 mg/cm ²		
Worker DNEL	, acute	dermal	local	11,2 mg/cm²		
Consumer DN	IEL, long-term	dermal	local	3,75 mg/cm ²		
Consumer DN	IEL, acute	dermal	local	11,2 mg/cm²		
Consumer DN	IEL, long-term	oral	systemic	0,56 mg/kg bw/dav		

PNEC values

CAS No	Substance					
Environmental	compartment	Value				
198028-14-7 Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- and N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and Decanamide, N,N'-1,2-ethanediylbis-						
Freshwater		0,0432 mg/l				
Marine water		0,00432 mg/l				
Freshwater se	diment	1080 mg/kg				
Marine sedime	ent	108 mg/kg				
Micro-organisr	ns in sewage treatment plants (STP)	10 mg/l				
Soil :		217 mg/kg				

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). BS/EN 166

Hand protection

In case of prolonged or frequently repeated skin contact:

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time >= 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

according to UK REACH Regulation

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Breakthrough time >= 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard

EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at: insufficient ventilation.

Suitable respiratory protective equipment: gas filtering equipment (EN 141).

Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid (Paste)
Colour: coloured

Odour: characteristic; Hydrocarbons.

Changes in the physical state

Melting point/freezing point:

Boiling point or initial boiling point and

270 °C

boiling range:

Sublimation point: not determined
Softening point: not determined
Pour point: not determined
Flash point: > 100 °C

Explosive properties

none

Lower explosion limits:

Upper explosion limits:

not determined

not determined

Auto-ignition temperature:

420 °C

Self-ignition temperature

Gas: not determined
Decomposition temperature: not determined
pH-Value: not determined
Viscosity / dynamic: not determined
Viscosity / kinematic: not determined
Flow time: not determined
Water solubility: not determined

Solubility in other solvents

not determined

according to UK REACH Regulation

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Partition coefficient n-octanol/water:

Vapour pressure:

Density:

1,54 g/cm³

Relative vapour density:

not determined

9.2. Other information

Information with regard to physical hazard classes

Sustaining combustion: Not sustaining combustion

Oxidizing properties

none

Other safety characteristics

Solvent separation test:

Solvent content:

2,34 %

Solid content:

not determined

not determined

rate:

not determined

Further Information

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
2768-02-7	trimethoxyvinylsilane; trimethoxy(vinyl)silane						
	oral	LD50 6 mg/kg	5,899	Rat	ECHA Dossier		
	dermal	LD50 3 mg/kg	3,158	Rabbit	ECHA Dossier		

according to UK REACH Regulation

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	inhalation vapour	LC50	16,8 mg/l	Rat	ECHA Dossier	
	inhalation aerosol	ATE	1,5 mg/l			
198028-14-7	Reaction mass of Octade N,N'-ethane-1,2-diylbis(12		, ,	• • • • • • • • • • • • • • • • • • • •	* *	
	oral	LD50 mg/kg	>2000	Rat (OECD 423)	ECHA Dossier	
	dermal	LD50 mg/kg	>2000	Rat (OECD 402)	ECHA Dossier	
	inhalation (4 h) aerosol	LC50	5,11 mg/l	Rat (OECD 403)	ECHA Dossier	

Irritation and corrosivity

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

Sensitising effects

Contains bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Specific effects in experiment on an animal

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

No data available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
2768-02-7	trimethoxyvinylsilane; trim	ethoxy(viny	l)silane					
	Acute fish toxicity	LC50 mg/l	137	96 h	Oncorhynchus mykiss	ECHA Dossier		
	Acute algae toxicity	ErC50 mg/l	> 64	72 h	Pseudokirchneriella subcapitata	ECHA Dossier		
	Acute crustacea toxicity	EC50	121 mg/l	48 h	Daphnia magna	ECHA Dossier		
198028-14-7	Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- and N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and Decanamide, N,N'-1,2-ethanediylbis-							
	Acute fish toxicity	LC50 mg/l	>100	96 h	Oncorhynchus mykiss (OECD 203)	ECHA Dossier		
	Acute algae toxicity	ErC50 mg/l	20,7	72 h	Pseudokirchneriella subcapita (OECD 201)	ECHA Dossier		
	Acute crustacea toxicity	EC50 mg/l	94,9	48 h	Daphnia magna (OECD 202)	ECHA Dossier		

12.2. Persistence and degradability

The product has not been tested.

according to UK REACH Regulation

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CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
	Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- and N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and Decanamide, N,N'-1,2-ethanediylbis-				
	OECD 301D / EEC 92/69 annex V, C.4-E	63 %	28	ECHA Dossier	
	Easily biodegradable (concerning to the criteria of the OECD)				

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-oxodecyl)amino]ethyl]- and N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and Decanamide, N,N'-1,2-ethanediylbis-	>6

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

Further information

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

080412 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products);

adhesive and sealant sludges other than those mentioned in $08\ 04\ 11$

List of Wastes Code - used product

080412 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

 ${\tt COATINGS~(PAINTS,~VARNISHES~AND~VITREOUS~ENAMELS),~ADHESIVES,~SEALANTS~AND~PRINTING~INKS;~wastes~from~MFSU~of~adhesives~and~sealants~(including~waterproofing~products);}$

adhesive and sealant sludges other than those mentioned in 08 04 11

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately

collected municipal packaging waste); mixed packaging

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

according to UK REACH Regulation

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SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Refer to section 6-8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): 2,34 %

Information according to 2012/18/EU Not subject to 2012/18/EU (SEVESO III)

(SEVESO III):

Additional information

Safety Data Sheet according to UK-REACH Regulation

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

UK REACH Appendix XVII, No (mixture): not relevant

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

according to UK REACH Regulation

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SECTION 16: Other information

Changes

Rev. 1.0; Initial release: 05.11.2021

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement

concerning the International Carriage of Dangerous Goods by Road)

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European LIst of Notified Chemical Substances

ECHA: European Chemicals Agency EWC: European Waste Catalogue

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

h: hour

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect concentration

NLP: No-Longer Polymers N/A: not applicable

OECD: Organisation for Economic Co-operation and Development

PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

REACH: Registration, Evaluation, Authorisation of Chemicals

SVHC: substance of very high concern TRGS: Technische Regeln für Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.

H332 Harmful if inhaled. H400 Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.
 Harmful to aquatic life with long lasting effects.

EUH208 Contains bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic

reaction.

according to UK REACH Regulation

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Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Health hazards: Calculation method. Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)