



Version: 1

Revision date: 27.06.2016

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

1.1. Product identifier

Tikal Fast Patch Basis

CAS No.:
EC No.:
INDEX No.:
REACH No.:

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

Relevant identified uses:
Uses advised against: Other

1.3. Details of the supplier of the safety data sheet

Manufacturer

Tikal Marine Systems GmbH

Werkstrasse 6
D 22844 Norderstedt

Telephone: +49 40 526 30 60 3

Telefax: +49 40 526 30 60 5

Supplier (manufacturer/importer/only representative/downstream user/distributor)

Tikal Marine Systems GmbH

Werkstrasse 6
D 22844 Norderstedt

Telephone: +49 40 526 30 60 3

Telefax: +49 40 526 30 60 5

Information contact

Tikal Marine Systems GmbH

Information telephone: +49 40 526 30 60 3

Information telefax: +49 40 526 30 60 5

E-mail (competent person): info@tikal-online.de

Website: <http://www.tikal-online.com>

National contact

Tikal Marine Systems GmbH

Information telephone: +49 40 526 30 60 3

Information telefax: +49 40 526 30 60 5

E-mail (competent person): info@tikal-online.de

Website: <http://www.tikal-online.com>

Dept. responsible for information:

Tikal Marine Systems GmbH

1.4. Emergency telephone number

Tikal Marine Systems GmbH

Telephone: +49 40 526 30 60 3

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008:

Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Aquatic Chronic. 2; H411

2.2. Label elements

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



Signal word:

GHS07, GHS09

Hazard statements:

Warning

Precautionary statements:

315 Causes skin irritation.
317 May cause an allergic skin reaction.
319 Causes serious eye irritation.
411 Toxic to aquatic life with long lasting effects.
102 Keep out of reach of children.
264.1 Wash hands thoroughly after handling.
273 Avoid release to the environment.
280 Wear protective gloves/protective clothing/eye protection/face protection.
302+352 IF ON SKIN: Wash with plenty of water/.?.
305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
332+313 If skin irritation occurs: Get medical advice/attention.
363 Wash contaminated clothing before reuse.

2.3. Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition / information on ingredients

3.1. Substances

3.2. Mixtures

Composition/information on ingredients

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008(CLP):
Bisphenol A-epichlorohydrin	500-033-5	25068-38-6	603-074-00-8		10 – 30 %	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic. 2; H411
1,4-bis(2,3 epoxypropoxy)butane	219-371-7	2425-79-8	603-072-00-7		1 – 10 %	Acute Tox. 4; H332 Acute Tox. 4; H312 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317

Bisphenol F epoxy resin		28064-14-4			1 – 10 %	Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic. 2; H411
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Substance with a common (EC) occupational exposure limit value

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008(CLP):

(Full text of H- and EUH-phrases: see section 16.)

Additional information

none

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).
Take off immediately all contaminated clothing.

Following inhalation: Provide fresh air.
In case of irritation of the respiratory tract seek medical advice.

Following skin contact: After contact with skin, wash immediately with plenty of water and soap.
In case of skin irritation, seek medical treatment.

After eye contact: 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 immediately and drink large quantities of water.
Seek medical attention if problems persist.

Self-protection of the first aider: First aid assistant: Pay attention to self-protection!

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

Symptoms: Erythema (reddening) Causes skin irritation.

Nature of Hazard: Irritating to eyes, respiratory system and skin.

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

Notes for the doctor:

Special treatment: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water fog.
Carbon dioxide (CO2).
Foam.
Dry extinguishing powder.

Unsuitable extinguishing media: High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire:
Pyrolysis products, toxic.

5.3. Advice for firefighters

General information

Extinguishing materials should be selected according to the surrounding area.
Use water spray/stream to protect personnel and to cool endangered containers.

Special protective equipment for firefighters:

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

Additional information

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Guide people to safety.
Provide adequate ventilation.

6.2. Environmental precautions

Do not empty into drains or the aquatic environment.
Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Treat the assimilated material according to the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid contact with skin and eyes.

Technical measures

Provide for sufficient ventilation and punctiform suction at critical points.

Precautions against fire and explosion

Usual measures for fire prevention.

Additional information

none

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Ensure adequate ventilation of the storage area.

Packaging materials

Keep/Store only in original container.

Requirements for storage rooms and vessels

Keep container tightly closed.

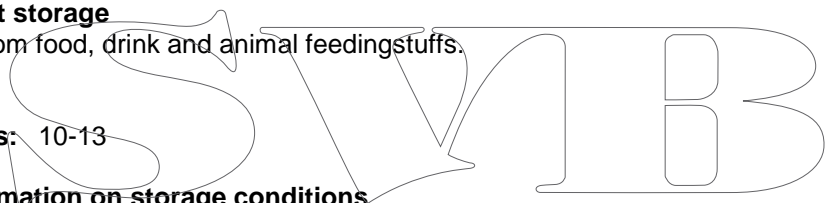
Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Storage class: 10-13

Further information on storage conditions

none



7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

occupational exposure limit value

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:

Substance with a common (EC) occupational exposure limit value

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:

DNEL-/PNEC-values

DNEL value

Substance:	CAS-No.:	DNEL/DMEL	Industry	Professional	consumer

PNEC Value

Substance:	CAS-No.:	PNEC	Worker, industry	Worker, professional	consumer

Risk management measures according to used control banding approach

none

Additional information

8.2. Exposure controls

Occupational exposure controls

Provide for sufficient ventilation and punctiform suction at critical points.

Technical measures and the application of adequate working methods take priority over the use of personal protection equipment.

General protection and hygiene measures

Do not eat, drink, smoke or sneeze at the workplace.

Wash hands before breaks and at the end of work.

Apply skin care products after work.

Wash contaminated clothing prior to re-use.

Personal protection equipment

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

Respiratory protection

Respiratory protection:

Hand protection

Tested protective gloves are to be worn:

German Industry Norms (DIN) / European Norms (EN):
DIN EN 374

Eye/face protection

Tightly sealed safety glasses.

Body protection

Suitable protection of the body:

Overall.

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Only wear fitting, comfortable and clean protective clothing.

Environmental exposure controls

refer to chapter 7. No further action is necessary.

Consumer exposure controls

refer to chapter 7. No further action is necessary.

Exposure Scenario

none

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state:	liquid
Colour:	white
Odour:	aromatic
Odour threshold:	not determined

Safety relevant basis data

	parameter	unit	remark
Density:		1,8 g/cm ³	
Bulk density:			not applicable
pH:			No data available
Melting point/freezing point:			No data available
Initial boiling point and boiling range:			No data available
Flash point:		147 °C	
Flammability (solid, gas):			No data available
Explosivity:			No data available
Lower explosion limit:			No data available
Upper explosion limit:			No data available
Ignition temperature:			No data available
Decomposition temperature:			No data available
Oxidizing potential:			No data available
Vapour pressure:			No data available
Vapour density:			No data available
Evaporation rate:			No data available
Water solubility:			not miscible
Fat solubility:			No data available
Soluble in:			mixable with most organic solvent cleaners
Partition coefficient: n-octanol/water:			not determined
Viscosity:			viscous
Solvent separation test:			not determined
Solvent content:			not determined

9.2. Other information

none

SECTION 10: Stability and reactivity

10.1. Reactivity

With proper storage and handling the product is stable.

10.2. Chemical stability

With proper storage and handling the product is stable.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

heat.

10.5. Incompatible materials

Oxidizing agents, strong. Acid.

10.6. Hazardous decomposition products

Contact with acids liberates toxic gas.

Additional information

none

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance:	CAS-No.:	Toxicological information
Bisphenol A- Epichlorhydrin (Reaktionsprodukte: Epoxidharze)	25068-38-6	LD50 oral (rat) 11400 mg/kg LD50 dermal (rabbit) > 22800 mg/kg
1,4-bis(2,3 epoxypropoxy)butan	2425-79-8	LD 50 oral (rat) 1130 mg/kg LD50 dermal (rabbit) 1130 mg/kg
Bisphenol-F-Epoxidharz	28064-14-4	LD50 oral (rat) > 2000 mg/kg LD 50-dermal (rat) > 400-mg/kg

Specific symptoms in laboratory animals

none

Irritation and etching

Irritant effect on the skin
irritant.

Irritant effect on the eye
irritant.

Irritant effect on the respiratory tract
irritant.

Additional information

Risk of serious damage to eyes.

Sensitization

May cause an allergic skin reaction.

Repeated dose toxicity (subacute, subchronic, chronic)

Danger of cumulative effects.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity
No indications of human carcinogenicity exist.

Germ cell mutagenicity
No indications of human germ cell mutagenicity exist.

Reproductive toxicity
No indications of human reproductive toxicity exist.

General remarks

none

Practical experience/human evidence

none

Other observations

none

Other information

none

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
Bisphenol A-epichlorohydrin	25068-38-6	
1,4-bis(2,3 epoxypropoxy)butane	2425-79-8	
Bisphenol F epoxy resin	28064-14-4	

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria).

12.3. Bioaccumulative potential

Bioaccumulative potential

12.4. Mobility in soil

If product enters soil, it will be mobile and may contaminate groundwater

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

Toxic to aquatic life. Toxic to soil organisms.

Further ecological information

Do not empty into drains or the aquatic environment.
Do not allow to enter into soil/subsoil.

Further details

none

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal/Product

Collect in closed and suitable containers for disposal.

Appropriate disposal / Package

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

List of proposed waste codes/waste designations in accordance with EWC

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Waste code product: 08 04 99 - Waste

Waste code packaging: 15 01 10 - packaging containing residues of dangerous substances or contaminated by dangerous substances

remark

Waste disposal according to official state regulations.

SECTION 14: Transport information

14.1. UN number

UN No.: 3082

14.2. UN proper shipping name

Official directive for the transport

Environmentally hazardous substance, liquid, n.o.s., fl.p. > 60 °C
(BISPHENOL A-(EPICHLORHYDRIN) (REACTION PRODUCT); 1,4-BIS(2,3-EPOXYPROPOXY) BUTANE)

Proper Shipping name

Environmentally hazardous substance, liquid, n.o.s., fl.p. > 60 °C
(BISPHENOL A-(EPICHLORHYDRIN) (REACTION PRODUCT); 1,4-BIS(2,3-EPOXYPROPOXY) BUTANE)

14.3. Transport hazard class(es)

Hazard label(s): 9

Classification code: M6

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmental hazards:

14.6. Special precautions for user

Land transport (ADR/RID)

Remark:

Transport category: 3 **Tunnel restriction code:** E
Special provisions: **Limited quantity (LQ):** 5 L

Sea transport (IMDG)

Special Provisions:

Remark:

EmS-No: F-A, S-F **MFAG:** **Marine pollutant:** p
Special provisions: **Limited quantity (LQ):** 5 L

Air transport (ICAO-TI / IATA-DGR)

Remark:

Limited quantity (LQ): 5 L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remark: none

SECTION 15: Regulatory information

Labeling

Hazardous component(s) for labelling

Bisphenol A- epichlorohydrin; 1,4-bis(2,3 epoxypropoxy)butane; Bisphenol F epoxy resin; Bisphenol A-epichlorohydrin

Special labelling of particular preparations

Safety data sheet available for professional user on request.

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

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

none

Regulation (EC) No 2037/2000 concerning materials, which cause damage to the ozone layer.

none

Regulation (EC) No. 648/2004 (Detergents regulation)

none

National regulations

Observe in addition any national regulations!

Restrictions of occupation

none

Storage class

10-13

Water hazard class (WGK)

2 water pollutant (WGK 2)

Other regulations, restrictions and prohibition regulations

none

15.2. Chemical Safety Assessment

For this preparation a chemical safety assessment has been carried out:

For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Relevant H- and EUH-phrases (Number and full text)

Hazard statements

- 315 Causes skin irritation.
- 317 May cause an allergic skin reaction.
- 319 Causes serious eye irritation.
- 411 Toxic to aquatic life with long lasting effects.

Training advice

none

Recommended restrictions of use

refer to chapter 1.

Further remarks

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.

Documentation of changes

none

Key literature references and sources for data

Data arise from reference works and literature.

Abbreviations and acronyms

none