



Version: 1

Revision date: 28.06.2016

---

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

### 1.1. Product identifier

# Tikal Fast Patch Haerter

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

Telephone: +49 40 526 30 60 3

Telefax: +49 40 526 30 60 5

Werkstrasse 6

D 22844 Norderstedt

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

Tikal Marine Systems GmbH

Telephone: +49 40 526 30 60 3

Telefax: +49 40 526 30 60 5

Werkstrasse 6

D 22844 Norderstedt

#### 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 Corr. 1B; H314 , Skin Sens. 1; H317 , Muta 2; H341

## 2.2. Label elements

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

Hazard pictograms:



GHS05, GHS07, GHS08

Signal word:

Danger

Hazard statements:

314 Causes severe skin burns and eye damage.

317 May cause an allergic skin reaction.

341 Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Precautionary statements:

102 Keep out of reach of children.

280 Wear protective gloves/protective clothing/eye protection/face protection.

301+330+331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

302+352 IF ON SKIN: Wash with plenty of water/?.

303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## 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):
Hexamethylene-1,6-diisocyanate, homopolymer		28182-81-2			10 – 30 %	Skin Sens. 1; H317 Acute Tox. 4; H332 STOT SE 3; H335 Aquatic Chronic. 3; H412
m-xylylenediamine		1477-55-0			1 – 10 %	Acute Tox. 4; H302 Skin Corr. 1B; H314 Skin Sens. 1; H317 Acute Tox. 4; H332 Aquatic Chronic. 3; H412

benzyl alcohol	202-859-9	100-51-6	603-057-00-5		1 – 10 %	Acute Tox. 4; H332 Acute Tox. 4; H302
Tris(dimethylaminomethyl) phenol	202-013-9	90-72-2	603-069-00-0		1 – 10 %	Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315
phenol	203-632-7	108-95-2	604-001-00-2		1 – 10 %	Muta 2; H341 Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 STOT RE 2; H373 Skin Corr. 1B; H314
octylamine	203-916-0	111-86-4			< 1 %	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 Acute Tox. 4; H332 Aquatic Acute 1; H400

**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:** Move victim to fresh air. Put victim at rest and keep warm. Immediately get medical attention.

**Following skin contact:** After contact with skin, wash immediately with plenty of water and soap. Immediately get medical attention.

**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. No administration in cases of unconsciousness or cramps. Do not induce vomiting. Immediately get medical attention.

**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:** Causes severe skin burns and eye damage.  
**Nature of Hazard:** Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc.

## 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 (CO<sub>2</sub>).  
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.  
Move undamaged containers from immediate hazard area if it can be done safely.

#### 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.  
Keep away from unprotected people. Keep upwind.

### 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

Provide for sufficient ventilation and punctiform suction at critical points.

#### 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

none

**Storage class:** 8 A Combustible corrosive substances.

#### Further information on storage conditions

Protect against:  
heat.

### 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:
phenol	108-95-2		TRGS 900	708 mg/m <sup>3</sup>	

### Substance with a common (EC) occupational exposure limit value

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:
phenol	108-95-2		Guideline 2009/161/EU	8 mg/m <sup>3</sup>	
octylamine	111-86-4				

### 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

none

## 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 required in case of:

Formation of aerosol.

Suitable respiratory protective equipment:

Combination filter device (DIN EN 141)..

### 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:  
Odour: aromatic  
Odour threshold: not determined

#### Safety relevant basis data

	parameter	unit	remark
Density:		1,78 g/cm <sup>3</sup>	
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:		> 100 °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 No data available
Partition coefficient: n-octanol/water:			No data available
Viscosity:			viscous
Solvent separation test:			No data available
Solvent content:			No data available

### 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

Gas/vapours, toxic.

#### Additional information

none

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Substance:	CAS-No.:	Toxicological information
Hexamethylene-1,6-diisocyanate, homopolymer	28182-81-2	
m-xylylenediamine	1477-55-0	LD50 oral (rat) 930 mg/kg LD50 dermal (rabbit) 2000 mg/kg
benzyl alcohol	100-51-6	LD50 oral (rat) 1230 mg/kg LD50 dermal (rabbit) 2000 mg/kg LC50 inh. (rat) > 4,178 mg/l/4 h
Tris(dimethylaminomethyl) phenol	90-72-2	LD50 oral (rat) 1200 mg/kg LD50 dermal (rat) 1280 mg/kg
phenol	108-95-2	LD50 oral (rat) 317 mg/kg LD50 dermal (rabbit) 630 mg/kg
octylamine	111-86-4	

#### Specific symptoms in laboratory animals

none

#### Irritation and etching

Irritant effect on the skin

Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc.

Irritant effect on the eye

Causes serious eye damage.

Irritant effect on the respiratory tract

irritant.

Additional information

Causes severe skin burns and eye damage.



### Sensitization

May cause sensitization in susceptible people.

### 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

Category 2 (EU): Materials that should be regarded to be reproductive hazards (fetal development hazards).

### General remarks

Even in the case of a mere suspicion of poisoning a doctor must be consulted.

### Practical experience/human evidence

Following symptoms can occur:

Corneal opacity.

Coughing.

### 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
phenol	108-95-2	LC50 fish (96 h) 20,5 mg/l LC50 shellfish (48 h) 20 mg/l
octylamine	111-86-4	LC50 fish (96 h) 5,19 mg/l EC50 shellfish (48 h) 1,9 mg/l

### 12.2. Persistence and degradability

Readily biodegradable (according to OECD criteria).

### 12.3. Bioaccumulative potential

No indication of bio-accumulation potential.

### 12.4. Mobility in soil

none

### 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

none

### 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

Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions.

#### 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 n.o.s

**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.  
Evidence for disposal must be provided.

---

## SECTION 14: Transport information

### 14.1. UN number

UN No.: 1760

### 14.2. UN proper shipping name

Official directive for the transport

Corrosive liquid, n.o.s., fl.p. > 60 °C

#### Proper Shipping name

Corrosive liquid, n.o.s., fl.p. > 60 °C

### 14.3. Transport hazard class(es)

Hazard label(s): 8

Classification code: C9

### 14.4. Packing group

Packing group: II

## 14.5. Environmental hazards

Environmental hazards:

## 14.6. Special precautions for user

Land transport (ADR/RID)

Remark:

Transport category: 2 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: -

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:

---

## SECTION 15: Regulatory information

### Labeling

#### Hazardous component(s) for labelling

Hexamethylene-1,6-diisocyanate, homopolymer; m-xylylenediamine; benzyl alcohol;  
Tris(dimethylaminomethyl)phenol; phenol; octylamine

#### Special labelling of particular preparations

Restricted to professional users.

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

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Youths are only allowed to handle this product according to the regulation 94/33/EC, and as long as all effects of dangerous substances are prevented.

**Storage class**

8 A Combustible corrosive substances.

**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**

314 Causes severe skin burns and eye damage.

317 May cause an allergic skin reaction.

341 Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

**Training advice**

Make sure that employees are aware of the intoxication risk. People wearing breathing apparatus must be appropriately trained.

**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