

**GUNOLD GmbH** 

#### **Thermofix**

Print date: 27.10.2011 Product code: VCSO-GD-005 Page 1 of 7

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

## 1.1. Product identifier

Thermofix

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

### Use of the substance/mixture

The product consists of adhesive fibres for permanent bonding of appliqués, patches, emblems, permanently fusing edges and for seaming.

### Uses advised against

In case of doubt please contact our responsible department.

### 1.3. Details of the supplier of the information sheet

Company name: GUNOLD GmbH

Street: Obernburger Straße 125 Place: D-63811 Stockstadt

Telephone: +49 (0)6027 - 2 00 80 Telefax: +49 (0)6027 - 37 72

e-mail: service@gunold.de

Contact person: Christoph Gunold Telephone: +49 (0)6027 - 2 00 80

e-mail: c.gunold@gunold.de
Internet: www.gunold.de
Responsible Department: Qualität und Umwelt

**1.4. Emergency telephone** +49 (0)6027 - 2 00 80 (Monday to Friday from 08:00 to 17:00)

number:

### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

This mixture is not classified as dangerous according to Directive 1999/45/EC.

The present product is an article according to the Directive (EG) Nr. 1907/2006 (REACH-Regulation).

There is no legal obligation to create a safety data sheet for an article.

The information data sheet was developed to provide the same information that is typically available in safety data sheets.

We would like to point out expressly that this information data sheet was created on a voluntary basis and is not subject of the formal requirements of the REACH-Regulation.

#### 2.2. Label elements

### Additional advice on labelling

The product is not subject to labelling.

# 2.3. Other hazards

No product hazards known.

Dust generation may cause irritations (mechanically), but are not expected when used properly.

The components in this formulation do not meet the criteria for classification as PBT or vPvB.



**GUNOLD GmbH** 

### **Thermofix**

Print date: 27.10.2011 Product code: VCSO-GD-005 Page 2 of 7

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### Chemical characterization

Adhesive fibres made of 100% copolyamides (Article).

According to supplier information the article does not contain any substances (SVHC) in concentrations with obligation to notify.

### **Hazardous components**

EC No.	Chemical name	Quantity
CAS No.	Classification	
Index No.	GHS classification	
REACH No.		
203-313-2	epsylon-caprolactam	2-3 %
105-60-2	Xn, Xi R20/22-36/37/38	2 0 70
613-069-00-2	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2; H332 H302 H319 H335 H315	

Full text of R- and H-phrases: see section 16.

### **Further Information**

The components of this product are embedded into an impenetrable matrix and are therefore biologically not available. Several hazardous components are bound within the polymermatrix and are not dangerous if handled under normal processing and handling conditions. The additives in this product do not pose any risk of danger, if they are not released (by emitted smoke when melted, dusts).

## **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

#### General information

First aid assistant: Pay attention to self-protection! Get medical advice/attention if you feel unwell.

#### After inhalation

In case of inhalation of decomposition products, take the affected person into the fresh air and sit him quietly. Seek medical attention if problems persist.

### After contact with skin

No special measures are necessary. After prolonged skin contact: Wash hands with soap and plenty of water After contact with skin and melted polymer: 1. cooling with water, 2. don't peel solidified product of skin. 3. burns have to be clinically treated

## After contact with eyes

Upon contact with dust or decomposition products: Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

# After ingestion

No special measures are necessary.

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

Not hazardous to health when used as intended.

Contact during processing with the hot product or the heat press / flat-iron can cause burns.

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

Treat symptomatically.



**GUNOLD GmbH** 

#### **Thermofix**

Print date: 27.10.2011 Product code: VCSO-GD-005 Page 3 of 7

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

### Suitable extinguishing media

Foam. Water fog. Extinguishing powder. Carbon dioxide (CO2).

## Extinguishing media which must not be used for safety reasons

High power water jet.

#### 5.2. Special hazards arising from the substance or mixture

It may produce hazardous fumes like carbon monoxide or carbon dioxide. When exceeding the decomposition temperature a depolymerization may occur and monomers could be released.

### 5.3. Advice for firefighters

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

#### Additional information

Extinguishing materials should be selected according to the surrounding area.

### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

No special precautionary measures are necessary.

#### 6.2. Environmental precautions

No special environmental protection measures are necessary.

Do not allow uncontrolled leakage of product into the environment.

## 6.3. Methods and material for containment and cleaning up

Collect mechanically. Avoid generation of dust.

## 6.4. Reference to other sections

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

## **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

## Advice on safe handling

Do not breathe dust. (Due to its shape it is rather unlikely that the product generates dust.) In case of fire:

Do not breathe gas/fumes/vapour/spray. The processing should be done below the decomposition temperature.

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

## 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Store in a well-ventilated place. Recommended storage temperature: at room temperature. Store in a dry place.

### Further information on storage conditions

Take precautionary measures against static discharges and fire hazards.

### 7.3. Specific end use(s)

The product consists of adhesive fibres for permanent bonding of appliqués, patches, emblems, permanently fusing edges and for seaming.

## **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters



## **Thermofix**

Print date: 27.10.2011 Product code: VCSO-GD-005 Page 4 of 7

## **Exposure limits (EH40)**

CAS No.	Chemical name	ml/m³	mg/m³	F/ml	Category	Origin
105-60-2	1,6-Hexanolactam, dust and vapour	-	10		TWA (8 h)	WEL
		-	20		STEL (15 min)	WEL

### 8.2. Exposure controls

## Occupational exposure controls

Do not inhalate aerially decomposition products. Ensure adequate ventilation.

## Protective and hygiene measures

Wash hands before breaks and at the end of work. When using do not eat or drink.

### Respiratory protection

In case of adequate ventilation: Respiratory protection not required.

Do not breathe potential fumes.

#### Hand protection

Within the recommended use no hand protection is required. Caution when handling with hot product!

#### Eye protection

Within the recommended use, no eye protection is required. Wear eye protection in case of contact with decomposition products.

### Skin protection

Skin protection: not required.

## **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: solid
Colour: white
Odour: odourless

Test method

pH-Value: No data available

Changes in the physical state

Melting point: 110-120 °C
Boiling point: No data available
Flash point: No data available

Flammability

Solid: No data available
Gas: No data available

**Explosive properties** 

No data available

Lower explosion limits:

Upper explosion limits:

No data available

Ignition temperature:

No data available

**Auto-ignition temperature** 

Solid: No data available
Gas: No data available

**Oxidizing properties** 

No data available



**Thermofix** 

Print date: 27.10.2011 Product code: VCSO-GD-005 Page 5 of 7

Vapour pressure:

Density (at 20 °C):

Water solubility:

No data available

1,25 g/cm³

easily soluble.

(at >2 °C)

Solubility in other solvents:

No data available
Partition coefficient:

No data available

Viscosity / dynamic:

Vapour density:

No data available

Evaporation rate:

No data available

9.2. Other information

Temperature of decomposition: >250°C

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No dangerous reactivity under regular conditions.

## 10.2. Chemical stability

The product is stable under normal environmental conditions (room temperature).

## 10.3. Possibility of hazardous reactions

No dangerous reactions to be expected if used properly.

## 10.4. Conditions to avoid

Avoid greater temperatures exceeding the process limitations over longer periods of time.

## 10.5. Incompatible materials

none known

## 10.6. Hazardous decomposition products

When exceeding the decomposition temperature a depolymerization may occur and monomers could be released.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

## **Acute toxicity**

No information available.

CAS No.	Chemical name					
	Exposure routes	Method	Dose	Species	h	Source
105-60-2	epsylon-caprolactam					
	Acute oral toxicity	LD50	1210 mg/kg	Ratte		GESTIS

### Irritation and corrosivity

Possible irritation of eyes and skin when dust or decomposition products are present. Skin irritation caused by the ingredients of the product is not known.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

Toxicological data are not available.



### **Thermofix**

Print date: 27.10.2011 Product code: VCSO-GD-005 Page 6 of 7

CAS No.	Chemical name							
	Aquatic toxicity	Method	Dose	Species	h	Source		
105-60-2	epsylon-caprolactam							
	Acute fish toxicity	LC50	500 - 1000	Onchorhynchus mykiss	96			
	Acute algae toxicity	ErC50	4550 mg/l	Algen	72	GESTIS		

## 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

No data available

### Partition coefficient n-octanol/water

CAS No.	Chemical name	Log Pow
105-60-2	epsylon-caprolactam	-0,19

## 12.4. Mobility in soil

No data available

## 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

### 12.6. Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

### Advice on disposal

Waste disposal according to official state regulations. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process. Can be burnt together with household waste in compliance with official regulations in contact with approved waste disposal companies and with authorities in charge. Dispose film remnants and manufactured film as hardened plastic waste.

## Contaminated packaging

Cleaned containers may be recycled.

## **SECTION 14: Transport information**

## Land transport (ADR/RID)

14.1. UN number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

# Other applicable information (land transport)

Not a hazardous material with respect to these transportation regulations.

## **Inland waterways transport**

### Other applicable information (inland waterways transport)

Not a hazardous material with respect to these transportation regulations.

#### Marine transport

### Other applicable information (marine transport)

Not a hazardous material with respect to these transportation regulations.

## Air transport



**GUNOLD GmbH** 

## **Thermofix**

Print date: 27.10.2011 Product code: VCSO-GD-005 Page 7 of 7

#### Other applicable information (air transport)

Not a hazardous material with respect to these transportation regulations.

### 14.5. Environmental hazards

Dangerous for the environment: no

## 14.6. Special precautions for user

No special precautionary measures are necessary.

# **SECTION 15: Regulatory information**

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

## **National regulatory information**

Water contaminating class (D): - - not water contaminating

### 15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

### **SECTION 16: Other information**

#### **Changes**

Version 1,00 - first creation - 19.07.2011

### Full text of R-phrases referred to under sections 2 and 3

Harmful by inhalation and if swallowed.

Irritating to eyes, respiratory system and skin.

## Full text of H-Statements referred to under sections 2 and 3

Harmful if swallowed

Causes skin irritation.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

## **Further Information**

The information given in this product information data sheet is to describe the product's safety regulations. It is not for guaranteeing certain characteristics and is based on today's knowledge. The product information data sheet was generated upon information of pre-suppliers by:

REACheck Solutions GmbH, Mühlstr. 94a, 63741 Aschaffenburg,

Phone: 06021 - 1 50 86-0, Fax: 06021 - 1 50 86-77, E-Mail: eu-sds@reacheck.com