

BSN Type I and Type H

Print date: 15.03.2012

Product code: VCSO-GD-002

Page 1 of 7

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

1.1. Product identifier

BSN Type I and Type H

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

Use of the substance/mixture

Thermo film for embroideries, patches and emblems. Making embroidery edges and borders extremely durable.

Uses advised against

In case of doubt please contact our responsible department.

1.3. Details of the supplier of the safety data 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 number: +49 (0)6027 - 2 00 80 (Monday to Friday from 08:00 to 17:00)

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.

BSN Type I and Type H

Print date: 15.03.2012

Product code: VCISO-GD-002

Page 2 of 7

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Thermoplastic adhesive film based on a polyolefin copolyamide mixture (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	epsilon-caprolactam	< 2,5 %
105-60-2	Xn, Xi R20/22-36/37/38	
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.

BSN Type I and Type H

Print date: 15.03.2012

Product code: VCISO-GD-002

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

Upon exposure to fire, harmful gases may be emitted. When decomposed by heat (250°C and above), e.g. due to overheating during treatment, in case of fire or smoldering, hazardous fumes (especially carbon monoxide, carbon dioxide, acetic acid, hydrogen bromide) may develop.

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 use above following temperatures: 220 °C

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

Recommended storage temperature: 0 °C and 45 °C. Protect from sunlight and heat sources. Store in a cool, dry place.

Further information on storage conditions

Take precautionary measures against static discharges and fire hazards.

7.3. Specific end use(s)

Thermo film for embroideries, patches and emblems. Making embroidery edges and borders extremely durable.

BSN Type I and Type H

Print date: 15.03.2012

Product code: VCISO-GD-002

Page 4 of 7

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No.	Chemical name	ml/m ³	mg/m ³	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 inhale aerielly 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, films
Colour: light opaque
Odour: odourless

Test method

pH-Value: not applicable

Changes in the physical state

Melting point: 100 - 110 °C

Boiling point: No data available

Flash point: No data available

Flammability

Solid: No data available

Gas: not applicable

Lower explosion limits: No data available

Upper explosion limits: No data available

Auto-ignition temperature

Solid: No data available

Gas: No data available

Oxidizing properties

No data available

BSN Type I and Type H

Print date: 15.03.2012

Product code: VCISO-GD-002

Page 5 of 7

Vapour pressure:		not applicable
Density:		1,1 g/cm ³
Water solubility:		insoluble
Solubility in other solvents:	No data available	
Partition coefficient:	No data available	
Viscosity / dynamic:		not applicable
Viscosity / kinematic:		not applicable
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

When properly used, no hazardous reactions are expected.

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 decomposed by heat (250°C and above), e.g. due to overheating during treatment, in case of fire or smoldering, hazardous fumes (especially carbon monoxide, carbon dioxide, acetic acid, hydrogen bromide) may develop.

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	epsilon-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.

BSN Type I and Type H

Print date: 15.03.2012

Product code: VCSO-GD-002

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

BSN Type I and Type H

Print date: 15.03.2012

Product code: VCISO-GD-002

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 – Version 1,01 –product name changed – 15.03.2012

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:

VESCON Solutions GmbH, Ebersbacher Straße 101, 63743 Aschaffenburg, Phone: 06021 - 1 50 86-0, Fax: 06021 - 1 50 86-77, E-Mail: eu-sds@vescon.com

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