



# EC safety data sheet

Trade name: TAMPAPUR TPU

Status: 01.04.01

Product no.: 3805

Version : 1 / GB

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## 1.) Identification of the substance/preparation and company

### Product details

#### Trade name

TAMPAPUR TPU

### Identification of the manufacturer / supplier

#### Address

Marabuwerke GmbH & Co. KG

Asperger Straße 4

D-71732 Tamm, Germany

Telephone no. +49 7141/691-0

Fax no. +49 7141/691-235

#### Information provided by / telephone

product safety/+49 7141/691-116 or 232

#### Emergency telephone number

product safety/+49 7141/691-116 or 232

## 2.) Composition / information on ingredients

### Chemical characterization

Pad printing ink based on acrylic resins and on solvents

### Hazardous ingredients

#### XYLENE

CAS no.	1330-20-7			
Concentration	>= 5	< 15		%-b.w.
Hazard symbols	Xn	R phrases	10, 20/21, 38	

#### N-BUTYL ACETATE

CAS no.	123-86-4			
Concentration	>= 1	< 15		%-b.w.
Hazard symbols	-	R phrases	10, 66, 67	

#### SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.

CAS no.	64742-95-6			
Concentration	>= 1	< 15		%-b.w.
Hazard symbols	N, Xn	R phrases	51/53, 66, 67, 65, 10, 37	

#### BUTYLGLYCOLATE

CAS no.	7397-62-8			
Concentration	>= 1	< 10		%-b.w.
Hazard symbols	Xi	R phrases	41	

#### ETHYLBENZENE

CAS no.	100-41-4			
Concentration	>= 1	< 5		%-b.w.
Hazard symbols	Xn, F	R phrases	11, 20	

**Ink shades 192, 193, 20, 21, 32, 36, 920, 922, 930, 932, 934, 936, 940, 950, 952, 954, 956, 960 and 962 contain additionally:**

#### 2-METHOXY-1-METHYLETHYL ACETATE

CAS no.	108-65-6			
Concentration	>= 1	< 15		%-b.w.
Hazard symbols	Xi	R phrases	10, 36	



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**Ink shades 21, 22, 32, 35, 36, 429, 439, 45, 489, 55, 57, 58, 64, 68, 73 and 980 contain additionally:  
3-METHOXYBUTYL ACETATE**

CAS no.	4435-53-4			
Concentration	>= 1	< 5		%-b.w.
Hazard symbols	Xi	R phrases		36

**Ink shades 191-193 contain additionally:**

**NAPHTHA (PETROLEUM), HYDRODESULFURIZED HEAVY**

CAS no.	64742-82-1			
Concentration	>= 1	< 5		%-b.w.
Hazard symbols	N, Xn	R phrases		10, 65, 51/53

### 3.) Hazards possibilities

#### Hazard symbols

Xn Harmful

#### R phrases

10	Flammable.
20/21	Harmful by inhalation and in contact with skin.
36	Irritating to eyes.

#### Particular information pertaining specific risk for human / environment

The product is water polluting.

### 4.) First aid measures

#### General information

Immediately remove all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical attention. Unconsciousness: lateral position - call a physician.

#### After inhalation

Take the casualty into the fresh air and keep warm. Irregular breathing/no breathing: artificial respiration. Call a physician.

#### After skin contact

Wash away with soap and water and rinse. Do NOT use solvents or thinners!

#### After eye contact

Flush with plenty of water (10 - 15 min.). Call a physician.

#### After ingestion

Call a doctor. Keep at rest. Do not induce vomiting.

### 5.) Firefighting measures

#### Suitable extinguishing media

Carbon dioxide, foam, sand, dry extinguishing agent.

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

Waterjet should not be used because water is not mixable with a lot of organic solvents and such solvents will spread on the water surface.

#### Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases

In case of fire, dangerous smoke gases such as carbon dioxide, carbon monoxide, soot, nitrogen oxides, metal oxides and halogenated hydrogens can be produced. Therefore, take suitable precautionary measures for fire fighting. Residues remaining after a fire have to be disposed of appropriately.

#### Special protective equipment for firefighting

Breathing apparatus with an independent source of air may be required.



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### Other information (chapter 5.)

Cool endangered containers with water in case of fire.

## 6.) Accidental release measures

### Personal precautions

Keep away from sources of ignition. Provide for good ventilation. Do not breathe vapours. Refer to protective measures listed in sections 7 and 8.

### Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

### Methods for cleaning up/taking up

Remove by liquid absorbing material (e.g. kieselguhr) and process according to waste regulations. Clean preferably with a detergent; avoid use of solvents.

## 7.) Handling and storage

### Handling

#### Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limit. Do not leave containers open. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Avoid contact with skin and eyes. Avoid inhalation of vapour and spray mist. When using do not eat, drink or smoke. Comply with the health and safety at work laws.

#### Advice on protection against fire and explosion

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used.

#### Classification of fires

B (Combustible liquid substances)

#### Ignition group

T3

### Storage

#### Requirements for storage rooms and vessels

Recommended storage temperature: 15-20°C. Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### Hints on storage assembly

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.

#### Further information on storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep away from sources of ignition. Keep containers dry and cool.

## 8.) Exposure controls / personal protection

### Additional hints on technical system design.

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.



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### Ingredients with occupational exposure limits to be monitored

#### XYLENE

CAS no. 1330-20-7

EINECS no. 215-535-7

OES/EH40

LTEL 100 ml/m<sup>3</sup> 441 mg/m<sup>3</sup>

STEL 150 ml/m<sup>3</sup> 662 mg/m<sup>3</sup>

Skin resorption /  
sensibilisation Sk

#### ETHYLBENZENE

CAS no. 100-41-4

EINECS no. 202-849-4

OES/EH40

LTEL 100 ml/m<sup>3</sup> 441 mg/m<sup>3</sup>

STEL 125 ml/m<sup>3</sup> 552 mg/m<sup>3</sup>

#### N-BUTYL ACETATE

CAS no. 123-86-4

EINECS no. 204-658-1

OES/EH40

LTEL 150 ml/m<sup>3</sup> 724 mg/m<sup>3</sup>

STEL 200 ml/m<sup>3</sup> 966 mg/m<sup>3</sup>

#### 1,2,4-TRIMETHYLBENZENE

CAS no. 95-63-6

EINECS no. 202-436-9

OES/EH40

LTEL 25 ml/m<sup>3</sup> 125 mg/m<sup>3</sup>

#### AROMATICS

OES/EH40

LTEL 500 mg/m<sup>3</sup>

#### Ink shades 191-193 contain additionally:

#### NORMAL AND BRANCHED CHAIN ALKANES, >=C7

OES/EH40

LTEL 1200 mg/m<sup>3</sup>

### Personal protective equipment

#### Respiratory protection

Breathing protection equipment required in inadequately ventilated places and during spraying.

Respiratory filter (gas) : A

Respiratory filter (part): P2

#### Hand protection

Use protective gloves.

#### Eye protection

Use safety glasses.

#### Skin protection

Personal should wear antistatic clothing made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact. Use re-greasing skin cream.

#### General protective and hygiene measures

The usual precautionary measures for the handling of chemicals have to be observed.



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### 9.) Physical and chemical properties

#### Appearance

Form	pasty
Colour	see trade name
Odour	characteristic

#### Safety data

##### Changes in physical state

Type	Boiling point (initial)	
Value	124	°C

##### Flash point

Value	36	°C
Method	ASTM D 6450 (CCCFP)	

##### Ignition temperature

Value	272	°C
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##### Explosion limits

Upper explosion limit	10,0	% vol
Lower explosion limit	0,7	% vol

##### Vapour pressure

Value	7	hPa
Reference temperature	20	°C

##### Density

Value	1,0	- 1,8	g/cm <sup>3</sup>
Reference temperature	20		°C

##### Viscosity

Type	Flow time	
Value	> 150	sec
Method	DIN-cup 4 mm	
Reference temperature	20	°C

##### Solubility in water

Remarks parts of solvents

##### Other information (chapter 9.)

The physical specifications are approximate values and refer to the used safety relevant component(s).

### 10.) Stability and reactivity

#### Conditions to avoid

Stable under recommended storage and handling conditions (See section 7).

#### Materials to avoid

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

#### Hazardous decomposition products

When exposed to high temperatures, dangerous decomposition products such as carbon dioxide, carbon monoxide, soot, nitrogen oxides, metal oxides and halogenated hydrocarbons can be produced.



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### 11.) Toxicological information

#### Experience in practice

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause symptoms like described above by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Vapours and the liquid itself will irritate the eyes.

If swallowed, stomach complaints and irritation of the digestive organs may result.

#### Other information (chapter 11.)

There are no data available on the preparation itself.

The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (88/379/EEC).

### 12.) Ecological information

#### General information / ecology

There are no data available on the preparation itself.

Do not empty into waters or drains

### 13.) Disposal considerations

#### Product

Dispose of or incinerate in accordance with corresponding regulations.

Code of waste pursuant to European Council Directive on waste: 080302 (Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesive, sealants and printing inks - wastes from MFSU of printing inks - waste ink free of halogenated solvents).

#### Uncleaned packaging

Uncleaned packaging must be disposed of in the same manner as the medium.

Code of waste pursuant on European Council Directive on waste: 150104 (Packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified - packaging - metallic).

### 14.) Transport information

#### Land transport ADR/RID

Class	3* 31 c
Remarks	Containers with a capacity <= 450 ltrs are subject only to the regulations of Rn. 2314 (remarks under E of Rn. 2301).

#### Marine transport IMDG/GGVSee

Class	3.3
Packaging group	III
UN number	1263
Proper shipping name	Paint
EmS	3-05
MFAG	310
MARPOL	---
Label	3



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### Air transport ICAO/IATA

Class	3
Packaging group	III
UN number	1263
Proper shipping name	Paint
Label	3

## 15.) Regulatory information

### Hazard symbols

Xn Harmful

### Hazardous component(s) to be indicated on label

XYLENE

### R phrases

10	Flammable.
20/21	Harmful by inhalation and in contact with skin.
36	Irritating to eyes.

### S phrases

20/21	When using do not eat, drink or smoke.
25	Avoid contact with eyes.
26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
29	Do not empty into drains.
51	Use only in well-ventilated areas.

## 16.) Other information

### Other information

According to their chemical structure, the applied raw materials do not contain any antimony, arsenic, soluble barium, lead, cadmium, chromium, mercury and selenium.

### Department issuing safety data sheet

Laboratory/product safety.

### Contact person

Dipl.-Chem. G. Heller or Dipl.-Ing. U. Voetter.

The instructions are based on today's information and knowledge. The safety data sheet describes products in relation to safety requirements. These instructions do not assure application technological properties of the product.

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