Print date:15.08.2024 Page 1 of 10

# Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

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## 1. Product and company name

## 1.1 Designation of the product (product identifier):

ANA Print Tray

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

## Use of the product (intended use):

Light-curable resin for 3 d printers, for tray material

### Not advisable for use as:

to be used exclusively for 3D printing

## 1.3 Details of the supplier providing the safety data sheet:

## Manufacturer / Supplier

Dent-a-pharm Produktionsgesellschaft mbH

#### Street

Schusterring 35

## Nat. no. / ZIP/postal code / city

D-25355 Barmstedt

## Contact point for technical information (safety data sheet)

Dr. Wolfgang Willmann +49 (0) 41 23 / 9225 0

#### Phone / Fax / E-mail

+49 (0) 4123 / 9225 0 / +49 (0) 4123 / 9228 48 / info@dent-a-pharm.de

## 1.4 Emergency number

## **Emergency information (24 hours):**

Dr. Wolfgang Willmann Tel: +49 (0) 170 / 4053052

#### Print date:15.08.2024 Page 2 of 10

# Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

## 2. Possible dangers

#### 2.1 Classification of the mixture

According to Regulation (EC) No 1272/2008:

Skin Sens. 1: May cause allergic skin reactions

Repr. 2: May presumably affect fertility and injure a child in the womb

## 2.2 Labeling elements

GHS labeling according to 1272/2008 (GHS/CLP)





H317	May cause	allorgic	ekin	reactions
пэ 17	iviav cause	aneruic	2KIII	reactions

P261 Inhalation of dust/fume/gas/mist/vapour/aerosol

must be avoided

P272 Do not wear contaminated work clothing outside the

workplace

P280 Protective gloves/protective clothing/

Wear eye/face protection

P333+P313 In the event of a skin irritation or rash: Seek medical

advice or obtain medical assistance.

P321 Special treatment (see...on this

label).

P362+P364 Take off contaminated clothing and wash before

wearing again.

P501 Dispose of any residuals in compliance with local

regulations

H361fd Suspected of harming fertility and suspected of

harming the unborn child.

P201 Obtain special instructions before use.

P202 Read and understand all safety instructions before use.

P308 + P313 IF exposed or affected:

Seek medical advice / medical assistance

P405 Keep under lock and key.

#### 2.3 Endocrine disrupting properties

The product does not contain any substances or mixtures of substances that have endocrine disrupting properties.

## Print date:15.08.2024 Page 3 of 10

# Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

## 3. Composition/information on the ingredients

## Chemical characterization: Hazardous ingredients of the mixture:

Substance	CAS No./EINECS No. /EC No.	Content (%)	Marking
Triethylene glycol dimethacrylate (TEDMA)	CAS no.: 109-16-0 EC no.: 203-652-6	30-35	Skin Sens. <b>1B/H317</b> May cause allergic skin reactions
Vinylester resin	CAS no.: 55818-57-0	45-50	Skin Sens. 1B/ <b>H317</b> May cause allergic skin reactions
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	CAS No. 75980-60-8 EC No. 278-355-8	2-3	Repr. 2/H361f May potentially impair fertility Aquatic Chronic 2/H411 Toxic to aquatic organisms, with long lasting effects Skin Sens. 1/H317 May cause allergic skin reactions
2.2-Dimethoxy-1.2- diphenylethan-1-one	CAS no.: 24650-42-8 EC No. 246-386-6	0,1-0,5	Aquatic Chronic 2/H411 Toxic to aquatic organisms, with long lasting effects
Dimethylhydroxyacetophenon e	CAS no.: 7473-98-5 EC no.: 231-272-0	< 0.1 %	Acute Tox. <b>4/H302</b> Harmful to health when ingested
2-ethylhexyl 4- (dimethylamino)benzoate	CAS no.: 21245-02-3 EC no.: 244-289-3	< 0.1%	Eye Irrit. 2/H319 Causes severe eye irritation Skin Irrit. 2/H315 causes skin irritation STOT SE 3/H335 may irritate the respiratory tract Repr. 1B/H360 May impair fertility or harm the child in the womb
2.2-Diethoxyacetophenone	CAS no.: 6175-45-7 EC no.: 228-220-4	< 0.1%	Eye Irrit. 2/H319 Causes severe eye irritation

#### Print date:15.08.2024 Page 4 of 10

# Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

2.2-Dimethoxy-1.2- diphenylethan-1-one	CAS no.: 24650-42-8 EC no.: 246-386-6	0,1-0,5	Aquatic Chronic 2/H411 Toxic to aquatic organisms, with long lasting effects
2-(2H-benzotriazol-2-yl)-p-cresol	CAS no.: 2440-22-4 EC no.: 219-470-5	0,1-0,5	Skin Sens. 1/H317 May cause allergic skin reactions Aquatic Chronic 4/H413 May be harmful to aquatic organisms with long lasting effects

#### 4. First aid measures

## 4.1 Description of the first aid measures

#### After inhalation

Move the affected person to fresh air. No further immediate assistance required.

#### After skin contact

Wash skin with soap and water and rinse well. In case of skin irritation, consult a doctor.

### After eye contact

Rinse the eyes with water for a sufficiently long time with the eyelids open. If eye irritation persists, seek medical advice.

#### After swallowing

Seek medical attention immediately

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

Eye and skin irritation possible

#### 4.3 Information on immediate medical assistance or specialised treatment

If skin or eye irritation persists, seek medical advice.

## 5. Firefighting measures

## 5.1 Extinguishing agent

Suitable extinguishing agents:

Foam, extinguishing powder, carbonic acid, water spray - Adapt fire extinguishing measures to the surroundings.

Extinguishing agents unsuitable for safety reasons:

None known

## 5.2 Special hazards arising from the mixture

There are no known hazards caused by the product itself, its combustion products, or the resulting gases.

#### Print date:15.08.2024 Page 5 of 10

# Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

## 5.3 Advice for fire fighting

The usual measures for fighting chemical fires, i.e. independent Use of respirator (isolation device).

#### 6. Measures in case of accidental release

#### 6.1 Personal precautions, protection:

Ensure sufficient ventilation

## 6.2 Environmental protection measures:

Do not allow to enter drains.

Disposal in accordance with local regulations.

## 6.3 Methods and material for retention and cleaning

Mechanically pick up material, cure in light and dispose of (Material to be disposed of in accordance with local regulations on special waste).

### 6.4 Reference to other sections

No references

## Handling and storage

## 7.1 Protective measures for safe handling

#### Recommendations:

The usual precautionary measures when handling chemicals must be observed. Wear a work coat during work.

### Notes on fire and explosion prevention:

No special measures necessary.

## 7.2 Conditions for safe storage taking incompatibilities into account

Cool, dry, closed and protected from light

Storage time: 3 years, if the storage conditions are observed.

#### 7.3 Specific end uses

Wear disposable gloves when working.

Ensure good suction when grinding the hardened material.

## 8. Exposure controls and personal protective equipment

#### 8.1 Parameters to be monitored

None known

PNCE and DNCL values as must be defined in a chemical safety report chemical safety report are not available.

## 8.2 Exposure controls and monitoring

## Personal protective equipment:

Observe protective and hygienic measures. Separate storage of protective clothing. The usual precautions when handling chemicals must be observed.

Respiratory protection: not required

Eye protection: Wear protective goggles when processing the material

Print date:15.08.2024 Page 6 of 10

# Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

Hand protection: Sensitization: The wearing of suitable protective gloves

(from past experience / literature) e.g. Ethiparat®-. Gloves for 5-10 minutes, use of no-touch technique,

minimal-contact-techniques recommended.

Body protection: Wear work clothes that are customary for the job.

Other

Protective measures: none

Details of the

industrial hygiene: Observe the usual occupational safety and hygiene measures.

Preventive skin protection.

Wash hands and face after finishing work.

### 9. Physical and chemical properties

### 9.1 Information on the basic physical and chemical properties

Except for the appearance, the information refers only to the acrylate resin used.

**Appearance:** Liquid, pink coloured mass **Odor:** according to acrylates / methacrylates

Odor threshold: no data
pH: not applicable

Melting point / freezing point: not specified

Initial boiling point and boiling ranges: not specified

Flash point: not determined (approx. > 100°C estimated according to

the flash points of the ingredients); no symbol necessary

Evaporation rate: not specified

Flammability: not specified

upper / lower flammability

or explosion limits: not specified

Vapor pressure: not specified vapor density: not specified not specified not specified not specified

relative density: 1.0871 g/ml
Solubility: insoluble in water

**Distribution coefficient** 

n-octanol / water: not specified

Auto-ignition temperature: not specified

**Decomposition temperature:** not specified

Viscosity: not specified explosive properties: not known

oxidizing properties: not known

9.2 Other data: none

## 10. Stability and reactivity

## 10.1 Reactivity

The material can polymerize slowly when exposed to solar irradiation and light.

#### 10.2 Chemical stability

The material is chemically stable if protected from heat, solar irradiation, and light.

## 10.3 Possibility of hazardous reactions

Slow polymerization of the material does not lead to excessive heat dissipation.

#### 10.4 Conditions to avoid

Keep away from heat, direct solar irradiation and light to avoid premature slow polymerization.

## 10.5 Incompatible materials

Protect from radical formers to avoid premature slow polymerization.

## 10.6 Hazardous decomposition products

None when used as intended

Print date:15.08.2024 Page 7 of 10

# Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

The product can polymerize slowly with low heat generation if the specified storage period and / or storage temperature are exceeded significantly.

## 11. Toxicological data

#### 11.1 Details

#### **Acute toxicity**

The mixture is not acutely toxic, as estimated from the ingredients.

#### Skin irritation

No skin irritation

### Eye irritation

No eye irritation

## Irritation of respiratory organs

No irritation of respiratory organs

#### Sensitization

Sensitization of the skin cannot be ruled out based on the ingredients.

### Toxicity in the case of repeated exposure

No toxicity in the case of repeated exposure.

## Carcinogenicity

Carcinogenicity can be ruled out based on the ingredients.

#### Mutagenicity

Mutagenicity can be ruled out based on the ingredients.

#### Reproductive toxicity

Reproductive toxicity can be ruled out based on the concentration of the ingredients.

## **Toxicokinetics**

According to the new safety data sheet under REACH, information on Toxicokinetics, metabolism and distribution of the substance in the body at this site.

be listed. We do not have any data on this.

The product must be labeled.

When handled and used as intended, the product has a long service life after According to our experience and the information available to us, there are no harmful effects.

The product should be handled with the usual care when handling chemicals. Allergic reactions to methacrylates are possible.

## 11.2 Information on other hazards

## 11.2.1 Endocrine disrupting properties

The product does not contain any substances or mixtures of substances with endocrine-disrupting properties.

### 11.2.2 Other information

No other harmful effects on health are known.

#### 12. Environmental information

#### Print date:15.08.2024 Page 8 of 10

## Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

12.1 Toxicity

Toxicity to fish: No data for the mixture

Aquatic organisms: not specified Bacterial toxicity: not specified

12.2 Persistence and degradability

The substances contained in the mixture are not degradable within a sufficient time

12.3 Bioaccumulation potential

No data available

12.4 Mobility in soil

No data available

## 12.5 Result of the determination of the PTB and vPvB assessment

Whether the material triggers or prevents hormonal effects is not known.

12.6 Other adverse effects

No data available

12.7 German Water hazard class: 1

### 13. Notes on disposal

## 13.1 Method for waste treatment of the preparation

Dispose of properly in accordance with local government regulations.

Do not allow to enter drains.

## Waste code according to the Waste Catalogue Ordinance (AVV)

**16 03 05** (organic wastes containing hazardous substances)

## **Packaging**

Non-contaminated packaging can be recycled.

#### 14. Transport data

#### 14.1 UN number

none

## 14.2 UN proper shipping name

none

## 14.3 Transport hazard classes

Not classified as dangerous goods under transport regulations.

#### 14.4 Packing group

none

#### 14.5 Environmental hazards

none

## 14.6 Special precautions for traffic

none

## 14.7 Bulk transport according to Annex II of MARPOL 73/79 according to IBC Code

No

## 15. Legislation

## 15.1 Classification of the mixture

According to Regulation (EC) No 1272/2008:

- Skin sens 1 B H317 May cause allergic skin reactions Repr. 1B H360 can impair fertility and

harm the child in the womb

#### Print date:15.08.2024 Page 9 of 10

## Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

## 15.2 Labeling elements

## GHS labeling according to 1272/2008 (GHS/CLP)





H317 May cause allergic skin reactions

P261 Inhalation of dust/fume/gas/mist/vapour/aerosol

must be avoided

P272 Do not wear contaminated work clothing outside the

workplace

P280 Protective gloves/protective clothing/

Wear eye/face protection

P333+P313 In the event of a skin irritation or rash: Seek medical

advice or obtain medical assistance.

P321 Special treatment (see...on this

label).

P362+P364 Take off contaminated clothing and wash before

wearing again.

P501 Dispose of any residuals in compliance with local

regulations

H360fd May presumably impair fertility. Can probably harm

the child in the womb.

P201 Obtain special instructions before use.

P202 Read and understand all safety instructions before use.

P308 + P313 IF exposed or affected:

Seek medical advice / medical assistance

P405 Keep under lock and key.

#### 15.2 Safety assessments

Safety assessments for substances in this preparation have not been performed.

## 15.3 Endocrine disrupting properties

The product does not contain any substances or mixtures of substances that have endocrine disrupting properties.

## 16. Other information

#### **Applicable EC directives**

Preparations Directive (1999/45/EC), as last amended by Directive 2006/8/EC Substances Directive (67/548/EEC), as last amended by Directive 2006/121/EC. REACH Regulation (EC) No 1907/2006 as amended by the REACH Directive Regulation (EC) No 1272/2008, as last amended by Regulation (EC) 2020/878.

## Limitation of use recommended by the manufacturer

For commercial use only - not a product for the general public. May only be used by appropriately trained and qualified professionals.

Print date:15.08.2024 Page 10 of 10

# Material safety data sheet in accordance with Regulation (EC) No. 2020 / 878

Revision: 02

revised on: 26.07.2023, SW

## H-phrases referred to in section 2 and 3

**H317** May cause allergic skin reactions

**H360fd** Suspected of affecting fertility and harming the unborn child.

## Changes compared to the last version

Labeling changed according to GHS labeling

## Data sheet issuing area

Dr. rer. nat. Wolfgang Willmann (Tel: 0 41 23 - 92 25 0)

#### Other notes:

Sources: 1 http://www.baua.de 2 http://www.arbeitssicherheit.de

Some of the information given here and conclusions drawn from it come from sources that are not determined from direct test data of the product itself.

The contents and format of this safety data sheet comply with Regulation (EC) No. 2020 / 878 of the EU Commission.

## **Warranty limitations**

The information in this safety data sheet has been obtained from sources we believe to be reliable. Nevertheless, this information is provided without any express or implied warranty as to its accuracy.

The conditions or methods of handling, storage, use or disposal of this product are beyond our control, and may be outside of our knowledge.

For this and other reasons, we expressly assume no responsibility for loss, damage to the product, or other costs incurred in connection with the use, storage or disposal of the product.

This safety data sheet has been prepared specifically and expressly for this product only and shall be used expressly for this purpose only.

If this product is used as a component of another product, this information is not applicable.