MATERIAL SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

2880610

Reviewed on: 30/06/2021
Printing date: 01/07/2021

SECTION 01: Identification of the substance/mixture and of the company undertaking

- ***1.1 Product identifier***

- *Trade name:*
  ALPOCRYL PERLSTRUKTUR 5371

- Article number / Safety Data Sheet:
  537100
- *1.2 Relevant identified uses of the substance or mixture and uses advised against*
- Application of the substance / the preparation
  Coating material

- ***1.3 Details of the supplier of the safety data sheet***
- *Manufacturer/Supplier:*

* Teknos AG
* Industriestrasse 7
LI-9487 Gamprin-Bendern
T +423 375 94 00
F +423 375 94 99

- *Further information obtainable from:*
  Product safety department. e-mail address: li-sdb@teknos.com
- *1.4 Emergency telephone number:*

* Swiss Toxicological Information Centre, CH-8032 Zürich Emergency telephone: +41 (0)44 251 51 51 (International)

SECTION 02: Hazards identification

- *2.1 Classification of the substance or mixture*
- Classification according to Regulation (EC) No 1272/2008

GHS02

Flam. Liq. 3 - H226 Flammable liquid and vapour.

GHS07

Acute Tox. 4 - H332 Harmful if inhaled.
Skin Irrit. 2 - H315 Causes skin irritation.
STOT SE 3 - H336 May cause drowsiness or dizziness.

- *2.2 Label elements*
- Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms

GHS02 GHS07

- Signal word
  Warning

- Hazard-determining components of labelling:
  n-butyl acetate / xylene / ethylbenzene / 2-butoxyethyl acetate
- Hazard statements
  H226 Flammable liquid and vapour.
  H332 Harmful if inhaled.
  H315 Causes skin irritation.
  H336 May cause drowsiness or dizziness.
  EUH208 Contains methyl methacrylate. May produce an allergic reaction.
- Precautionary statements
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P233 Keep container tightly closed.

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P240 Ground/bond container and receiving equipment.
P302+P352 IF ON SKIN: Wash with plenty of water.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.

- ***2.3 Other hazards***
- *Results of PBT and vPvB assessment*
- PBT:
  Not applicable.
- vPvB:
  Not applicable.

SECTION 03: Composition/information on ingredients

- ***3.2 Chemical characterization: Mixtures***
- *Description:*
  Mixture of substances listed below with nonhazardous additions.

- *Dangerous components:*

CAS Number		%
123-86-4	**n-butyl acetate** EC number: 204-658-1 Flam. Liq. 3 - H226; STOT SE 3 - H336	**25,00- 40,00**
1330-20-7	**xylene** EC number: 215-535-7 Flam. Liq. 3 - H226; Acute Tox. 4 - H312, Acute Tox. 4 - H332, Skin Irrit. 2 - H315	**15,00- 25,00**
100-41-4	**ethylbenzene** EC number: 202-849-4 Flam. Liq. 2 - H225; STOT RE 2 - H373, Asp. Tox. 1 - H304; Acute Tox. 4 - H332	**1,00- 5,00**
80-62-6	**methyl methacrylate** EC number: 201-297-1 Flam. Liq. 2 - H225; Skin Irrit. 2 - H315, Skin Sens. 1 - H317, STOT SE 3 - H335	**0,00- 0,50**
112-07-2	**2-butoxyethyl acetate** EC number: 203-933-3 Acute Tox. 4 - H312, Acute Tox. 4 - H332	**1,00- 5,00**

SECTION 04: First aid measures

- *4.1 Description of first aid measures*
- ***General information:***
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- ***After inhalation:***
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- ***After skin contact:***
  Immediately wash with water and soap and rinse thoroughly.

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- ***After eye contact:***
  Rinse opened eye for several minutes under running water.
- ***After swallowing:***
  Do not induce vomiting; call for medical help immediately.
- ***Information for doctor:***
- *4.2 Most important symptoms and effects, both acute and delayed*
  No further relevant information available.
- *4.3 Indication of any immediate medical attention and special treatment needed*
  No further relevant information available.

SECTION 05: Firefighting measures

- ***5.1 Extinguishing media***
- ***Suitable extinguishing agents:***
  CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- ***For safety reasons unsuitable extinguishing agents:***
  Water with full jet
- ***5.2 Special hazards arising from the substance or mixture***
  Formation of toxic gases is possible during heating or in case of fire.
- ***5.3 Advice for firefighters***
- *Protective equipment:*
  Mouth respiratory protective device.
  Do not inhale explosion gases or combustion gases.
- ***Additional information***
  Cool endangered receptacles with water spray.
  Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 06: Accidental release measures

- ***6.1 Personal precautions, protective equipment and emergency procedures***
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation
- ***6.2 Environmental precautions:***
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/ surface or ground water.
- ***6.3 Methods and material for containment and cleaning up:***
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- ***6.4 Reference to other sections***
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 07: Handling and storage

- ***Handling:***
- *7.1 Precautions for safe handling*
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
  Take note of emission threshold.
  Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- *Information about fire - and explosion protection:*
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.

- *7.2 Conditions for safe storage, including any incompatibilities*
- ***Storage:***
- *Requirements to be met by storerooms and receptacles:*
  Store only in the original receptacle.

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- *Information about storage in one common storage facility:*
  Not required.
- *Further information about storage conditions:*
  Keep container tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.
  Protect from heat and direct sunlight.
- ***7.3 Specific end use(s)***
  No further relevant information available.

SECTION 08: Exposure controls/personal protection

- *8.1 Control parameters*
- ***Ingredients with limit values that require monitoring at the workplace:***

123-86-4 n-butyl acetate
WEL

Short-term value	**966**	**mg/m3**
	200	**ppm**
Long-term value	**724**	**mg/m3**
	150	**ppm**

1330-20-7 xylene
WEL

Short-term value	**441**	**mg/m3**
	100	**ppm**
Long-term value	**220**	**mg/m3**
	50	**ppm**

Sk; BMGV

100-41-4 ethylbenzene
WEL

Short-term value	**552**	**mg/m3**
	125	**ppm**
Long-term value	**441**	**mg/m3**
	100	**ppm**

Sk

80-62-6 methyl methacrylate
WEL

Short-term value	**416**	**mg/m3**
	100	**ppm**
Long-term value	**208**	**mg/m3**
	50	**ppm**

112-07-2 2-butoxyethyl acetate
WEL

Short-term value	**332**	**mg/m3**
	50	**ppm**
Long-term value	**133**	**mg/m3**
	20	**ppm**

Sk

- Ingredients with biological limit values:

1330-20-7 xylene
BMGV
650 mmol/mol creatinine
Medium: urine
Sampling time: post shift

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Parameter: methyl hippuric acid

- *Additional information:*
  The lists valid during the making were used as basis.

- *8.2 Exposure controls*
- ***Personal protective equipment:***
- *General protective and hygienic measures:*
  The usual precautionary measures are to be adhered to when handling chemicals.
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing
  Do not inhale gases / fumes / aerosols.
  Avoid contact with the eyes and skin.
  Do not eat or drink while working.
  Be sure to clean skin thoroughly after work and before breaks.
- *Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Suitable respiratory protective device recommended.*
- *Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Protective gloves Impervious gloves*
- Material of gloves
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
- *Eye protection: Safety glasses Tightly sealed goggles*
- *Body protection: Protective work clothing*

SECTION 09: Physical and chemical properties

9.1 Information on basic physical and chemical properties				
Appearance				
Appearance:				
Form:	Liquid			
Colour:	Different according to colouri			
Odour:	Solvent-like Characteristic			
Odour threshold:	Not determined.			
Change in condition				
Boiling point/Boiling range:	124 °C			
Flash point:	27 °C c.c.			
Flammability (solid, gaseous):	Not applicable.			
Ignition temperature:	425 °C			
Decomposition temperature:	Not determined.			
Self-igniting:	Not determined.			
Danger of explosion:	Not determined.			
Explosion limits:				
Lower:	1 Vol %			
Upper:	7 Vol %			
Vapour pressure:	at 20 °C mbar	6,7000 mbar at	50 °C	55,0000
Density:	1,1800 g/cm3			
Solubility in / Miscibility with				

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water:	Not determined.
Viscosity:	
.	Not determined.
.	at 20 °C
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- *10.1 Reactivity*
- *10.2 Chemical stability*
- ***Thermal decomposition / conditions to be avoided:***
  No decomposition if used according to specifications.
- *10.3 Possibility of hazardous reactions*
  No dangerous reactions known.
- *10.4 Conditions to avoid*
  No further relevant information available.
- ***10.5 Incompatible materials:***
  No further relevant information available.
- ***10.6 Hazardous decomposition products:***
  No dangerous decomposition products known.

SECTION 11: Toxicological information

- ***11.1 Information on toxicological effects***
- ***Acute toxicity:***
- *LD/LC50 values relevant for classification:*

123-86-4 n-butyl acetate
Oral, LD50: 13100 mg/kg (rat) Dermal, LD50: >5000 mg/kg (Rabbit) Inhalative, LC50/4h: >21,0 mg/l (rat) Oral, LD50: 4300 mg/kg (rat) Dermal, LD50: 2000 mg/kg (Rabbit) Oral, LD50: 3500 mg/kg (rat) Dermal, LD50: 17800 mg kg (Rabbit) Oral, LD50: 7872 mg/kg (rat) Oral, LD50: 5050 mg/kg (rat) Oral, LD50: 8532 mg/kg (rat) Inhalative, LC50/4h: 35,7 mg/l (rat) Oral, LD50: >6800 mg/kg (rat) Dermal, LD50: >3400 mg/kg (Rabbit) Inhalative, LC50/4h: >10,2 mg/l (rat) Oral, LD50: >20000 mg/kg (rat) Dermal, LD50: >10000 mg/kg (Rabbit) Inhalative, LC50/4h: >6,82 mg/l (rat) Oral, LD50: >200 mg/kg (rat) Oral, LD50: 2400 mg/kg (rat) Dermal, LD50: 1580 mg/kg (Rabbit) Oral, LD50: 10000 mg/kg (rat) Oral, LD50: 526 mg/kg (rat) Oral, LD50: 14500 mg/kg (rat) Oral, LD50: 2460 mg/kg (rat) Dermal, LD50: 3400 mg/kg (Rabbit) Oral, LD50: 5000 mg/kg (rat) Dermal, LD50: 12124 mg/kg (Rabbit) Inhalative, LC50/4h: 5320 mg/l (mouse) Oral, LD50: 800 mg/kg (rat) Dermal, LD50: 1834 mg/kg (Rabbit) Inhalative, LC50/4h: 2180 mg/l (rat)

1330-20-7 xylene
100-41-4 ethylbenzene
80-62-6 methyl methacrylate
868-77-9 2-hydroxyethyl methacrylate
108-65-6 2-methoxy-1-methylethyl acetate
64742-95-6 Solvent naphtha (petroleum), light arom.
13463-67-7 titanium dioxide
50-00-0 formaldehyde
112-07-2 2-butoxyethyl acetate
7631-86-9 silicon dioxide, chemically prepared
7447-41-8 lithium chloride
67-68-5 dimethyl sulfoxide
78-83-1 butanol
108-88-3 toluene
140-88-5 ethyl acrylate

- *Primary irritant effect:*
- on the skin:
  No irritant effect.
- on the eye:
  No irritating effect.

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- *Sensitization:*
  No sensitising effects known.
- ***Additional toxicological information:***
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  Harmful

SECTION 12: Ecological information

- *12.1 Toxicity*
- Aquatic toxicity:
  No further relevant information available.
- ***12.2 Persistence and degradability***
  No further relevant information available.
- ***Behaviour in environmental systems:***
- *12.3 Bioaccumulative potential*
  No further relevant information available.
- 12.4 Mobility in soil
  No further relevant information available.
- ***Additional ecological information:***
- *General notes:*
  Do not allow product to reach ground water, water course or sewage system.
  Danger to drinking water if even small quantities leak into the ground.
  Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
- ***12.5 Results of PBT and vPvB assessment***
- *PBT:*
  Not applicable.
- *vPvB:*
  Not applicable.
- ***12.6 Other adverse effects***
  No further relevant information available.

SECTION 13: Disposal considerations

- ***13.1 Waste treatment methods***
- *European and swiss waste code*

08
WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01
wastes from MFSU and removal of paint and varnish
08 01 11
waste paint and varnish containing organic solvents or other hazardous substances

- ***Uncleaned packaging:***
- *Recommendation:*
  Disposal must be made according to official regulations.

SECTION 14: Transport information

- ***14.1 UN-Number***

ADR	UN1263
IMDG	UN1263
IATA	UN1263

- ***14.2 UN proper shipping name***

ADR	1263 PAINT
IMDG	PAINT
IATA	PAINT

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• ***14.3 Transport hazard class(es)***

ADR

Class 3 Flammable liquids.

Label

IMDG

Class 3 Flammable liquids.

Label

IATA

Class 3 Flammable liquids.

Label

• ***14.4 Packing group***

ADR III

IMDG III

IATA III

• ***14.5 Environmental hazards:***
Not applicable.

• ***14.6 Special precautions for user***
Warning: Flammable liquids.

Danger code (Kemler): 30

EMS Number: F-E,S-E

• ***14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code***
Not applicable.

• ***Transport/Additional information:***
Not applicable.

Excepted quantities (EQ): E1

Limited quantities (LQ) 5L

Transport category 3

Tunnel restriction code D/E

IMDG

Limited quantities (LQ) 5L

Excepted quantities (EQ) E1

• ***UN "Model Regulation":***
UN 1263 PAINT, 3, III

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according to 1907/2006/EC, Article 31

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SECTION 15: Regulatory information

- ***15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture***
- *REGULATION (EC) No 1907/2006 ANNEX XVII*
  Conditions of restriction: 3, 48

- ***National regulations:***

- *Classification according to VbF:*
  –

- *Technical instructions (air):*
- Class Share in %

III	26,80
II	19,05
I	

- *Waterhazard class:*
  Water hazard class 2 (Self-assessment): hazardous for water.
- ***15.2 Chemical safety assessment:***
  A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

- ***Department issuing MSDS:***
  Environment protection department.
- *Abbreviations and acronyms:*
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  ICAO: International Civil Aviation Organisation
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
- ** Data compared to the previous version altered.*