

1 Identification of the substance/preparation and of the company/undertaking

· **Product details**

· **Trade name:** APP 2K Härter EPHS APP Nr. 021206

· **Application of the substance / the preparation** Hardening agent/ Curing agent

Intended use: Hardener intended for use with two-component epoxy coating APP 2K Primer EP 2:1

· **Manufacturer/Supplier:**

APP Auto-Plast Produkt Sp.z o.o

ul. Przemysłowa 10

PL- 62-300 Wrzesnia

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· **Further information obtainable from:** Laboratory

· **Information in case of emergency:** +48 (0)61 437 00 00

2 Hazards identification

· **Hazard description:**



Xn Harmful

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 10 Flammable.

R 20/21 Harmful by inhalation and in contact with skin.

R 36/38 Irritating to eyes and skin.

· **Classification system:**








The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

· **Chemical characterization**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 1330-20-7 EINECS: 215-535-7	xylene	 Xn,  Xi; R 10-20/21-38	50-100%
CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one	 Xn,  Xi,  F; R 11-20-36/37-66	10-25%
CAS: 71-36-3 EINECS: 200-751-6	butan-1-ol	 Xn,  Xi; R 10-22-37/38-41-67	2.5-10%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 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.

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- In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire-fighting measures

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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

1330-20-7 xylene

WEL	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
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108-10-1 4-methylpentan-2-one

WEL	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm Sk
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71-36-3 butan-1-ol

WEL Short-term value: 154 mg/m³, 50 ppm
Sk

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

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **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.

· **Protection of hands:**



Protective gloves

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

· **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.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 114°C

· **Flash point:** 27°C (DIN 53213)

· **Ignition temperature:** 340°C (DIN 51794)

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· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.1 Vol %
Upper:	9.0 Vol %
· Vapour pressure at 20°C:	8 hPa
· Density at 20°C:	0.872 g/cm ³ (DIN 53217)
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Viscosity:	
Dynamic at 20°C:	1500 mPas
· Solvent separation test:	< 3 %
· Solvent content:	
Organic solvents:	83.7 %
VOC (EC)	730.6 g/l
· Solids content (weight-%):	16.3 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** Carbon monoxide

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
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108-10-1 4-methylpentan-2-one

Oral	LD50	2080 mg/kg (rat)
Dermal	LD50	16000 mg/kg (rab)
Inhalative	LC50/4 h	8.3-16.6 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing 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
Irritant

GB

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12 Ecological information

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
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.

13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

08 01 11	waste paint and varnish containing organic solvents or other dangerous substances
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· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 (F1) Flammable liquids.
- **Danger code (Kemler):** 30
- **UN-Number:** 1263
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** 1263 PAINT RELATED MATERIAL, special provision 640E
- **Remarks:** ≤ 450 l: -

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1263
- **Label** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-E
- **Marine pollutant:** No
- **Proper shipping name:** PAINT RELATED MATERIAL
- **Remarks:** ≤ 30 l: -

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· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label:** 3
- **Packaging group:** III
- **Proper shipping name:** PAINT RELATED MATERIAL

15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

Xn Harmful

· **Hazard-determining components of labelling:**

xylene

· **Risk phrases:**

- 10 Flammable.
- 20/21 Harmful by inhalation and in contact with skin.
- 36/38 Irritating to eyes and skin.

· **Safety phrases:**

- 2 Keep out of the reach of children.
- 9 Keep container in a well-ventilated place.
- 13 Keep away from food, drink and animal feedingstuffs.
- 16 Keep away from sources of ignition - No smoking.
- 36/37 Wear suitable protective clothing and gloves.
- 46 If swallowed, seek medical advice immediately and show this container or label.

· **National regulations:**

· **Information about limitation of use:**

None of the ingredients is listed.

Class	Share in %
NK	50-100

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 R-phrases**

- 10 Flammable.
- 11 Highly flammable.
- 20 Harmful by inhalation.
- 20/21 Harmful by inhalation and in contact with skin.
- 22 Harmful if swallowed.
- 36/37 Irritating to eyes and respiratory system.
- 37/38 Irritating to respiratory system and skin.

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- 38 *Irritating to skin.*
- 41 *Risk of serious damage to eyes.*
- 66 *Repeated exposure may cause skin dryness or cracking.*
- 67 *Vapours may cause drowsiness and dizziness.*

- *Department issuing MSDS: APP Auto-Plast Produkt Sp.z o.o*
- *Contact: Rafal Roguszka*
- ** Data compared to the previous version altered.*