

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

- **1.1 Product identifier**
- **Trade name:** Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Hardening agent/ Curing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Unicolor AG
Alte Landstrasse 63
CH-8500 Frauenfeld
Tel. +41(0)52/723 21 58
e-mail: info@unicolor-ag.ch
www.unicolor.com
- **1.4 Emergency telephone number:** Toxikologische Informationszentrum in Zürich: Kurzwahl 145

SECTION 2: Hazards identification

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



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Org. Perox. D H242 Heating may cause a fire.



corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.



STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS02



GHS05



GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**
Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane
Ethyl acetate
cyclohexanone peroxide(s)
- **Hazard statements**
H225 Highly flammable liquid and vapour.
H242 Heating may cause a fire.

(Contd. on page 2)

GB

Trade name: Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)

(Contd. of page 1)

H314 Causes severe skin burns and eye damage.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P410 Protect from sunlight.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards
Results of PBT and vPvB assessment

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients
3.2 Mixtures

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

Dangerous components:

CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46	Ethyl acetate Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	25-50%
CAS: 1338-23-4 EC number: 700-954-4 Reg.nr.: 01-2119514691-43	Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane Org. Perox. D, H242; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332	10-25%
CAS: 131-11-3 EINECS: 205-011-6 Reg.nr.: 01-2119437229-36	dimethyl phthalate substance with a Community workplace exposure limit	2.5-<10%
CAS: 12262-58-7 EINECS: 235-527-7 Reg.nr.: 02-2119716628-32	cyclohexanone peroxide(s) Org. Perox. C, H242; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3, H412 Specific concentration limit: STOT SE 3; H335: C ≥ 5 %	≥5-<10%
CAS: 78-93-3 EINECS: 201-159-0 Reg.nr.: 01-2119457290-43	Methyl ethyl ketone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	<1%

• **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures
4.1 Description of first aid measures

• **General information:** Immediately remove any clothing soiled by the product.

• **After inhalation:** Supply fresh air; consult doctor in case of complaints.

• **After skin contact:** Immediately rinse with water.

• **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

• **After swallowing:** If symptoms persist consult doctor.

• **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

Trade name: Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)

(Contd. of page 2)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: 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**
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** 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).
Use neutralising agent.
Dispose contaminated material as waste according to section 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 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep away from heat and direct sunlight.
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.
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Storage class:** 5.2
- **7.3 Specific end use(s)** No further relevant information available.

GB

(Contd. on page 4)

Trade name: Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)

(Contd. of page 3)

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

141-78-6 Ethyl acetate

WEL Short-term value: 1468 mg/m³, 400 ppm
Long-term value: 734 mg/m³, 200 ppm

1338-23-4 Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane

WEL Short-term value: 1.5 mg/m³, 0.2 ppm

131-11-3 dimethyl phthalate

WEL Short-term value: 10 mg/m³
Long-term value: 5 mg/m³

78-93-3 Methyl ethyl ketone

WEL Short-term value: 899 mg/m³, 300 ppm
Long-term value: 600 mg/m³, 200 ppm
Sk, BMGV

· Ingredients with biological limit values:

78-93-3 Methyl ethyl ketone

BMGV 70 µmol/L
Medium: urine
Sampling time: post shift
Parameter: butan-2-one

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

· 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as 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.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Filter A/P2 (EN 141, EN 143)



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.

· **Hand protection**



Protective gloves (EN 374)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.7 mm

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.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.10.2023

Version number 4 (replaces version 3)

Revision: 11.10.2023

Trade name: Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)

(Contd. of page 4)

- Breakthrough time of glove material Value for the permeation: Level ≤ 4
- Eye/face protection



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state

Fluid

· Colour:

According to product specification

· Odour:

Characteristic

· Odour threshold:

Not determined.

· Melting point/freezing point:

Undetermined.

· Boiling point or initial boiling point and boiling range

77-78 °C (141-78-6 Ethyl acetate)

· Flammability

May cause fire.

Highly flammable.

· Lower and upper explosion limit

· Lower:

2.1 Vol % (141-78-6 Ethyl acetate)

· Upper:

11.5 Vol % (141-78-6 Ethyl acetate)

· Flash point:

2 °C (DIN 53213)

· Auto-ignition temperature:

460 °C (DIN 51794, 141-78-6 Ethyl acetate)

· Decomposition temperature:

Not determined.

· pH

Not determined.

· Viscosity:

· Kinematic viscosity

Not determined.

· Dynamic at 20 °C:

38 mPas

· Solubility

· water:

Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure at 20 °C:

97 hPa (141-78-6 Ethyl acetate)

· Vapour pressure at 50 °C:

360 hPa

· Density and/or relative density

· Density at 20 °C:

1.009 g/cm³ (DIN 53217)

· Relative density

Not determined.

· Vapour density

Not determined.

· 9.2 Other information

· Appearance:

· Form:

Fluid

· Important information on protection of health and environment, and on safety.

· Ignition temperature:

Product is not selfigniting.

· Explosive properties:

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Solvent content:

· VOC (EC)

45.90 %

· Solids content (weight-%):

26.6 %

· Change in condition

· Evaporation rate

Not determined.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.10.2023

Version number 4 (replaces version 3)

Revision: 11.10.2023

Trade name: Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)

(Contd. of page 5)

· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Highly flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Heating may cause a fire.
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **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:** Carbon monoxide

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **STOT-single exposure** May cause respiratory irritation. May cause drowsiness or dizziness.
- **11.2 Information on other hazards**

· Endocrine disrupting properties

78-93-3 Methyl ethyl ketone

List II

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 7)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.10.2023

Version number 4 (replaces version 3)

Revision: 11.10.2023

Trade name: Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)



(Contd. of page 6)

- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
 - Water hazard class 1 (German Regulation) : slightly hazardous for water
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 - Must not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
 - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|---|
| · 14.1 UN number or ID number | UN3105 |
| · ADR, IMDG, IATA | |
| · 14.2 UN proper shipping name | UN3105 ORGANIC PEROXIDE TYPE D, LIQUID (methyl ethyl ketone peroxide(s), cyclohexanone peroxide(s)) |
| · ADR | |
| · IMDG, IATA | ORGANIC PEROXIDE TYPE D, LIQUID (methyl ethyl ketone peroxide(s), cyclohexanone peroxide(s)) |
| · 14.3 Transport hazard class(es) | |
| · ADR | |
|  | |
| · Class | 5.2 (P1) Organic peroxides. |
| · Label | 5.2 |
| · IMDG, IATA | |
|  | |
| · Class | 5.2 Organic peroxides. |
| · Label | 5.2 |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Warning: Organic peroxides. |
| · Hazard identification number (Kemler code): | - |
| · EMS Number: | F-J,S-R |

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.10.2023

Version number 4 (replaces version 3)

Revision: 11.10.2023

Trade name: Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)

(Contd. of page 7)

· Stowage Category	D
· Stowage Code	SW1 Protected from sources of heat.
· Segregation Code	SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis. SG72 See 7.2.6.3.2.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	125 ml
· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	125 ml
· UN "Model Regulation":	UN 3105 ORGANIC PEROXIDE TYPE D, LIQUID (METHYL ETHYL KETONE PEROXIDE(S), CYCLOHEXANONE PEROXIDE(S)), 5.2

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - Directive 2012/18/EU
 - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
 - **Seveso category** P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES
 - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
 - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
 - **National regulations:**
 - **Additional classification according to Decree on Hazardous Materials, Annex II:**
- | Class | Share in % |
|-------|------------|
| NK | 25-50 |
- **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.
- H242 Heating may cause a fire.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.
- H412 Harmful to aquatic life with long lasting effects.
- EUH066 Repeated exposure may cause skin dryness or cracking.

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.10.2023

Version number 4 (replaces version 3)

Revision: 11.10.2023

Trade name: Härter PS (AP-Merit 2K-Hardener for Polyester-Filler 7534)

(Contd. of page 8)

· **Classification according to Regulation (EC) No 1272/2008**

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Org. Perox. C: Organic peroxides – Type C/D

Org. Perox. D: Organic peroxides – Type C/D

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**