

Section 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY**1.1. Product identifier:**

Trade name: APP Harter Klarlack UHS 410 2:1 - Hardener for acrylic varnish | solvent-free | 2.5L

Product code: 020334

UFI: TS9T-Q1VD-A00P-HKFX

1.2. Relevant identified uses of the substance and uses advised against:

Hardener for varnish.

Uses advised against:

Other.

1.3. Details of the supplier of the safety data sheet:

APP Sp. z o. o.

10 Przemysłowa Street, 62 – 300 Września

Tel. +48 (061) 437 00 00

Fax: +48 (061) 437 91 37

Email: app@app.com.plWebsite: www.app.com.pl

Current safety data and technical information are available on the website.

Person responsible for the product: Product Management Department, dzp@app.com.pl**1.4. Emergency telephone number:**

+48 (61) 437 00 00 (between 8.00 am and 4.00 pm)

Date of issue: 13 February 2026

Section 2. HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture:**

Classification in accordance with Table 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council (GHS Regulation) and based on data provided by the manufacturer:



GHS02



GHS07



GHS08

Hazard

FlamLiq2: H226 Flammable liquid and vapour.

AspTox1: H304 May be fatal if swallowed and enters the respiratory tract.

SkinSens1: H317 May cause an allergic skin reaction.

AcuteTox4: H332 Harmful if inhaled.

STOT SE3: H335 May cause respiratory irritation.

STOT SE3: H336 May cause drowsiness or dizziness.

AquaticChronic3: H412 Harmful to aquatic life with long-lasting effects.

2.2. Labelling elements:**Contains:**

Hexamethylene diisocyanate, oligomers

N-butyl acetate

2-butoxyethyl acetate

Hydrocarbons, C9, aromatic

Signal word:

Danger

GHS pictograms:



GHS02



GHS07



GHS08

Hazard statements:

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters the respiratory tract.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H412 Toxic to aquatic life with long-lasting effects.
EUH204 Contains isocyanates. May cause an allergic reaction
EUH 066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sources of sparks, open flames and other sources of ignition. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IF ON SKIN: wash with plenty of water/...
P304 + P340 IF INHALED: remove or carry the affected person to fresh air and ensure they can breathe easily.
P370 + P378 In case of fire: use ABC dry powder, foam extinguisher (AB), carbon dioxide (BC) extinguisher carbon dioxide (BC) to extinguish.
P403 + P233 Store in a well-ventilated area. Keep the container tightly
.
P501 Dispose of contents/container at an authorised waste disposal facility.

2.3. Other hazards:

UN: 1263

No information is available regarding compliance with the PBT or vPvB criteria in accordance with Annex XIII of Regulation 1907/2006 (REACH). No tests have been carried out.
The product does not contain any ingredients included in the list established in accordance with Article 59(1) as having endocrine-disrupting properties, nor does it contain substances with properties that disrupt endocrine-disrupting properties in accordance with the criteria set out in Regulation 2017/2100/EU or Regulation 2018/605/EU in a concentration of 0.1% or more.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS


3.1. Substances:

Not applicable.

3.2. Mixtures:

The classification of the substances contained in the product is given in accordance with Table 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council (GHS Regulation) and on the basis of data provided by the manufacturer.

Name of hazardous substance	Concentration range	CAS number	Index number	EC number	Hazard symbols Hazard
Hexamethylene diisocyanate oligomers REACH Registration No.: 01-2119485493-29	50–75 %	28182-81-2	none	500-060-2	GHS07; Note AcuteTox4: H332 SkinSens1: H317 STOT SE3: H335 ATE – Inhalation (dust/mist) 4.625 mg/l

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		In accordance with Commission Regulation (EU) 2020/878				
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C9 hydrocarbons, aromatic H and P statements applied. Does not contain benzene. REACH Reg. No.: 01-2119455851-35	10–25%	none	none	918-668-5	GHS08 Hazard Flam. Liq. 3, H226 Asp. Tox. 1: H304 Aquatic Chronic 2: H411 STOT SE 3; H335+H336	
Butyl acetate REACH Registration No.: 01-2119485493-29	25-<50%	123-86-4	607-025-00-1	204-658-1	GHS02; GHS04 Note Flam.Liq.3: H226 STOT SE3: H336 EUH066	
2-Butoxyethyl acetate REACH registration number: 01-2119475112-47	10-25%	112-07-2	607-038-00-2	203-933-3	GHS07 Note AcuteTox4: H312 AcuteTox4: H332	

For the wording of the phrases used – see section 16.

Section 4. FIRST AID MEASURES

4.1. Description of first aid measures:

4.1.1 First aid guidelines by relevant routes of exposure:

Show the Safety Data Sheet to the attending doctor. In the event of exposure to vapours and aerosols of the product, move the affected person to a well-ventilated area – seek medical assistance

a) respiratory tract: immediately move the affected person to a well-ventilated area; place the affected person in a semi-recumbent position, loosen clothing, ensure that there are no objects or secretions in the affected person's mouth that may obstruct breathing; if the affected person is not breathing – perform artificial respiration; seek medical assistance immediately.

b) skin: remove contaminated clothing; wash contaminated skin with plenty of soapy water; do not use any solvents or thinners to wash the skin; apply a moisturising cream to the cleansed skin; if skin irritation occurs – consult a doctor.

c) eyes: rinse contaminated eyes, with eyelids open, under a continuous stream of running water for 10–15 minutes; avoid a strong stream of water, which may risk damaging the cornea; if burning or irritation persists, consult a doctor; do not use any eye wash solutions or ointments before consulting a doctor; if the affected person is wearing contact lenses, remove them if possible; seek medical assistance if eye irritation occurs.

d) digestive tract: rinse the mouth with plenty of running water; do not induce vomiting; if the victim is conscious, give them water to drink in small sips (approx. 0.2–0.3 l); do not give anything to an unconscious person; if the victim feels unwell, consult a doctor;

4.1.2. Other:

None.

4.2. Most important acute and delayed symptoms and effects of exposure:

Acute symptoms:

May cause an allergic skin reaction.

May cause respiratory tract irritation.

Harmful if inhaled.

May cause drowsiness or dizziness.

Contains isocyanates. May cause an allergic reaction.

Delayed symptoms:

Ingestion and entry into the respiratory tract may be fatal.



May cause an allergic skin reaction.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Contains isocyanates. May cause an allergic reaction.

4.3. Indications for any immediate medical attention and special treatment of the affected person:

If a significant amount of the product has been ingested, seek medical advice.

Section 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media:

- a) Recommended extinguishing media: Water spray, dry powder extinguishers, alcohol-resistant foam.
- b) Extinguishing media not recommended: Avoid strong water jets, which may spread the fire.

5.2. Special hazards arising from the substance/mixture:

Vapours of the product form flammable and explosive mixtures with air. Vapours may rise to the ignition source and return as a flame. Heating, sparks or contact with fire may cause ignition. Emits toxic gases in the event of a fire. Keep away from sources of ignition – do not smoke whilst spraying. Keep out of reach of children. Without adequate ventilation, explosive mixtures may form

5.3. Information for the fire service:

Wear self-contained breathing apparatus and suitable protective clothing.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1. For non-emergency personnel:

- When removing the material, wear protective clothing, protective gloves, safety goggles and a gas mask

6.1.2. For first aiders:

- When removing the product, avoid the formation and inhalation of vapours and aerosols
- wear well-fitting and tight-fitting safety goggles, protective gloves and protective clothing

6.2. Environmental precautions:

- in the event of a large-scale release into water or soil, notify the relevant authorities

6.3. Methods and materials for preventing the spread of contamination and for decontamination:

6.3.1. Recommendations for preventing the spread of a spill:

- store and transport in leak-proof containers
- remove the product immediately
- prevent the product from entering watercourses or drainage systems
- rinse the area after removal of the product and any equipment that has come into contact with it

6.3.2. Recommendations for spill clean-up:

- Absorb with non-flammable absorbent material (e.g. diatomaceous earth)
- collect the absorbent material in a clearly labelled, sealable container
- Eliminate all possible sources of ignition; do not smoke

6.3.3. Other information:

None

6.4. References to other sections:

See information in sections 8 and 13.

Section 7. HANDLING AND STORAGE OF THE MIXTURE

7.1. Precautions for safe handling:

7.1.1. General recommendations:

- avoid electrical and electrostatic discharges
- do not allow vapour concentrations of the product in the air where mixtures with air may be explosive, nor concentrations exceeding occupational exposure limits
- ensure easy access to fire-fighting agents and equipment necessary for dealing with a spill substance
- follow general health and safety rules for working with chemicals and good industrial practice; strictly adhere to established procedures; when working with the product, apply the general health and safety regulations set out in the Regulation of the Minister of Labour and Social Policy of 30 December 2004 (Journal of Laws No. 11 of 2005, item 86); follow the recommendations contained in the instructions provided by the manufacturer

- avoid contact with eyes, skin and clothing

- avoid prolonged and repeated exposure

7.1.2. Occupational hygiene guidelines:

- do not eat or drink whilst using the product
- do not smoke whilst working with the product
- Avoid the formation and inhalation of vapours
- wear suitable work (protective) clothing and protective gloves (rubber or PVC) when working with the product
- an eye wash station must be available at the workstation



Flash point

44°C

Auto-ignition temperature

300°C

Decomposition temperature

No data available

pH

No data

Kinematic viscosity

<20.5 mm²/s (40°C)

Solubility

No data

n-octanol/water partition coefficient (log value)

No data available

Vapour pressure

392 Pa (20°C), 2150.36 Pa (°C)

Density or relative density

1.0 g/ml

Relative vapour density:

No data available

Molecular characteristics

Not applicable

9.2. Other information:

Information on physical hazard classes

No data available

Other safety properties

No data available

Section 10. STABILITY AND REACTIVITY

10.1. Reactivity:

Reacts vigorously with amines and alcohols – exothermic reaction. Reacts with water and moisture – carbon dioxide is released.

10.2. Chemical stability:

The product is chemically stable.

10.3. Possibility of hazardous reactions:

None

10.4. Conditions to avoid:

High temperatures. Ignition sources, heat sources, sources of sparks.

10.5. Incompatible materials:

- strong acids
- strong oxidisers

10.6. Hazardous decomposition products:

- carbon oxides
 - toxic gases and fumes
-

Section 11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) Acute toxicity

Hexamethylene diisocyanate oligomers

ATE (rat, inhalation): 4.625 mg/l

Butyl acetate

LD50 (rat, oral): 10,768 mg/kg

LD50 (rabbit, dermal): 17,600 mg/kg

LC50 (rat, inhalation): 23,400 mg/dm³ / 4 hours

Harmful if inhaled.

b) Corrosive/irritating effect on the skin

No data available.

The mixture is not classified as hazardous in this category.

c) Serious eye damage/eye irritation

No data available.

The mixture is not classified as hazardous in this category.

d) Respiratory or skin sensitisation

May cause an allergic skin reaction.



e) Mutagenic effects

No data available.

The mixture is not classified as hazardous in this category.

f) Carcinogenicity

No data available.

The mixture is not classified as hazardous in this category.

g) Reproductive toxicity

No data available.

The mixture is not classified as hazardous in this category.

h) Specific target organ toxicity – single exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

i) Specific target organ toxicity – repeated exposure

No data available.

The mixture is not classified as hazardous in this category.

i) Aspiration hazard:

Ingestion and entry into the respiratory tract may be fatal.

11.2. Information on other hazards

11.2.1. Endocrine-disrupting properties

The product does not contain any ingredients included in the list established in accordance with Article 59(1) as having endocrine-disrupting properties, nor does it contain ingredients with properties that disrupt endocrine-disrupting properties in accordance with the criteria set out in Regulation 2017/2100/EU or Regulation 2018/605/EU in a concentration of 0.1% or more.

11.2.2. Other information

- no data available

Section 12. ECOLOGICAL INFORMATION

12.1. Toxicity:

Harmful to aquatic organisms, causing long-term effects.

Toxicity:

Hexamethylene diisocyanate oligomers

- for algae EC50: >1000 mg/l/72 h

Butyl acetate

- for fish LC50: 18 mg/l/96 h

- for invertebrates (Daphnia) EC50: 32 mg/l/48 h

- EC50 for algae: 675 mg/l/72 hours

12.2. Persistence and degradability:

The substance is biodegradable.

12.3. Bioaccumulative potential:

No data available.

12.4. Mobility in soil:

No data available.

12.5. Results of the PBT and vPvB assessment:

None.

12.6. Endocrine-disrupting properties

None.

12.7. Other adverse effects:

None.

Section 13. WASTE MANAGEMENT

13.1. Waste treatment methods:

13.1.1. Product:

- waste type: Waste paints and varnishes containing organic solvents or other hazardous substances

- waste code: 08 01 11*

- hazardous waste

If possible, recover and return to production. Do not dispose of with household waste. Do not discharge into the sewerage system. Do not allow contamination of surface water, groundwater and soil. Dispose of in accordance with current regulations relating to chemical waste. Dispose of only at designated sites, in facilities or equipment meeting statutory requirements.

13.1.2 Packaging:

- waste type: Metal packaging

- waste code: 15 01 04



Section 14. TRANSPORT INFORMATION

LAND TRANSPORT:

- 14.1. **UN number or ID number:** 1263
14.2. **UN proper shipping name:** PAINT
14.3. **Transport hazard class:** 3
14.4. **Packing group:** III
14.5. **Environmental hazards:** none
14.6. **Special precautions for users:** None
14.7. **Transport in bulk by sea in accordance with IMO instruments:**
not applicable
Other:
Identification code: F1
Labels: 3
Hazard identification number: 33

Section 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations specific to substances and mixtures:

1. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94, as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (30.12.2006 EN Official Journal of the European Union L 396/1) as amended (9.10.2008 EN Official Journal of the European Union L 268/14; 17 February 2009 Official Journal of the European Union L 46/3; 26 June 2009 Official Journal of the European Union L 164/7; 1 April 2010 Official Journal of the European Union L 86/7; 31 May 2010 Official Journal of the European Union L 133/1; 18 February; EN Official Journal of the European Union L44/2; 21 May 2011 EN Official Journal of the European Union L134/2) as subsequently amended.
2. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (referred to as the GHS Regulation) (31.12.2008 EN Official Journal of the European Union L 353/1), as subsequently amended.
3. Act of 28 May 2020 amending the Act on Chemical Substances and their Mixtures and certain other Acts (Journal of Laws 2020, item 1337)
4. Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the maximum dopuszczal concentrations and intensities of factors harmful to health in the workplace (Journal of Laws 2018, item 1286)
5. Regulation of the Minister of Health of 2 February 2011 on tests and measurements of factors harmful to health in the workplace (Journal of Laws 2011, No. 33, item 166)
6. Commission Regulation (EU) No 252/2011 of 15 March 2011 amending Annex I to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
7. COMMISSION REGULATION (EU) No 253/2011 of 15 March 2011 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XIII
8. Regulation of the Minister for Development of 8 August 2016 on the limitation of emissions of volatile organic compounds contained in certain paints and varnishes intended for the painting of buildings and their finishing elements, fittings and structural elements associated with buildings and such elements, and in mixtures for the refurbishment of vehicles (Journal of Laws 2016, item 1353)
9. Regulation of the Minister of Economy of 10 March 2014 amending the Regulation on specific requirements for aerosol products (Journal of Laws 2014, item 345)
10. COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
11. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

15.2. Chemical safety assessment:

No data available.

Section 16. OTHER INFORMATION

Wording of the hazard statements listed in sections 2 and 3 of the safety data sheet:

H226

Flammable liquid and vapour.



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In accordance with Commission Regulation (EU) 2020/878

Date of update: 13 February
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H304	May be fatal if swallowed and enters the respiratory tract.
H312	Causes serious skin burns.
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.
H411	Toxic to aquatic life with long-lasting effects.
H412	Harmful to aquatic life with long-lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Medical examinations of employees and tests and measurements of harmful factors must be carried out in accordance with applicable regulations.

The above information has been compiled based on current knowledge and experience. However, it does not constitute a guarantee of the product's properties or quality specifications and cannot form the basis for a claim. The product should be transported, stored and used in accordance with applicable regulations and good working practices and hygiene.

The manufacturer accepts no liability for losses arising directly or indirectly from the application of the above interpretation of regulations or instructions.

The information provided does not apply to mixtures of the product with other substances. The use of the information provided, as well as the use of the product, is not controlled by the manufacturer; therefore, it is the user's responsibility to ensure appropriate conditions for the safe handling of the product.