Safety Data Sheet according to Regulation (EC) No1907/2006

Date of Compilation/Revision: 27.12.2020.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE **COMPANY/UNDERTAKING** 1.1. Product identifiers UV curable hard varnish Type of substance: CLP Mixture 1.2. Relevant identified uses of the substance or mixture and uses advised against UV-curable acrylic resin adhesive., mainly used in logos, decorations and souvenirs. 1.3. Details of the supplier of the safety data sheet Pentacolor Kft. 1103 Budapest, Gyömrői út 86. tel.: +36-1-260-7477 fax: +36-1-262-1345 e-mail: info@pentacolor.hu For product safety information please contact: info@pentacolor.hu 1.4. Emergency telephone number https://echa.europa.eu/documents/10162/23019181/emergency_phone_numbers_en.pdf/d911af43 -4bcf-9371-a59d-a20736d91e7d

SECTION 2: HAZARDS IDENTIFICATION

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

Skin Irrit. 2	H315 Causes skin irritation
Skin Sens. 1	H317 May cause an allergic skin reaction
Eye Irrit. 2	H319 Causes serious eye irritation
STOT SE 3	H335 May cause respiratory irritation.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 Hazard pictograms



Signal Word Warning

Hazard Statements

- H315 Causes skin irritation
- H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements

P102 Keep out of reach of children.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with soap and water
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P233+P405 Store in a well-ventilated place. Keep container tightly closed. Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous components which must be listed on the label:

Isobornyl acrylate

2.3. Other hazards

The ingredients are not PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture

The details below includes all impurities and by-products that contribute to the product classification or that have an occupational exposure limits.

Substance(s): 2-Propanoic acid, 2-methyl-, polymer with ethyl 2-propanoateand methyl 2-methyl-2proponoate concentration: 50-70% EC-No.: 607-559-5 CAS-No.: 25133-97-5 Classification according to Regulation (EC) No 1272/2008 : --

Hazardous Substance(s): Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate, isobornyl acrylate concentration: 10-20% EC-No.: 227-561-6 CAS-No.: 5888-33-5 Classification according to Regulation (EC) No 1272/2008 : Skin Irrit. 2 H315, Skin Sens. 1 H317, Eye Irrit. 2 H319, STOT SE 3 H335, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1) (SCL: STOT SE 3 H335: $c \ge 10$ %)

Hazardous Substance(s): Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide concentration: < 3% EC-No.: 278-355-8 CAS-No.: 75980-60-8 Index No.: 015-203-00-X Classification according to Regulation (EC) No 1272/2008 : Repr. 2 H361f (causes testicular atrophy)

Substance(s): Hydroxycyclohexyl phenyl ketone concentration: < 3% EC-No.: 213-426-9 CAS-No.: 947-19-3 Classification according to Regulation (EC) No 1272/2008 : --

Refer to Section 16 for full details of the hazard statements and Notas.

SECTION 4: FIRST AID MEASURES

4.1. Description of necessary first-aid measures General advise:

First aider needs to protect himself. Take off all contaminated clothing immediately. **Inhalation:**

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. **Eye contact:**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician . Consult a doctor in case of persistent symptoms or complaints. **Skin contact:**

Remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

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Ingestion:

Rinse mouth. Get immediate medical attention.

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

Causes skin and eye irritation. skin contact excess or repeating with glue , may stimulate skin , few person has skin allergy. Harmful for health.

4.3. Indication of immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Foam. Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Oxides of phosphorus. Other irritating organic gas.

Unusual fire or explosion: uncontrollable polymerization at high temperature can cause explosion or crack of the bottle.

5.3. Advice for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures For non-emergency personnel

Avoid contact with skin and eyes. Avoid inhalation of vapours or mists. Ensure adequate ventilation. Wear protective clothing as described in section 8 of this safety data sheet. Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Keep unnecessary personnel away. Spilled material is contained and, if possible, recovered. Absorb residue with dry sand, earth or similar inert absorbent material and collect in barrels for later disposal. Wash contaminated area with plenty of water.

6.4. Reference to other sections

Use personal protective equipment recommended in section 8. For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid breathing mists or vapours. Avoid contact with eyes, skin, and clothing. Keep out of reach of children. Provide adequate ventilation. Wear appropriate personal protective equipment. . Observe good industrial hygiene practices. Use only outdoors or in a well-ventilated area.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. . Keep away from sources of ignition and heat. Do not use in high temperature, frozen, sparks and flame condition. Do not fall the poured out gel back to the original container. Quality guarantee period: 12 months. Storage temperature: 8 - 28 C

7.3. Specific end uses

See section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values. 8.2. Exposure controls Appropriate engineering controls Provide adequate ventilation.

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Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Personal protective equipment

Eye/face protection

Wear tight-fitting goggles or face shield.

Skin protection

Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove

Body Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection

Avoid inhalation of vapours or mists.

Where intense vapors or aerosols are generated during use, use the required respirator for organic materials.

Hygiene measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. Wash at the end of each work shift and before eating, smoking or using the toilet.

Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

- (a) Appearance: clear liquid
- (b) Odour: Acrylate resin
- (c) Odour threshold: no data available
- (d) pH: 6,2
- (e) Melting point/freezing point: not determined
- (f) Initial boiling point and boiling range: not determined
- (g) Flash point: 105 C
- (h) Evaporation rate: no data available
- (i) Flammability (solid, gas): not applicable. (liquid)
- (j) Upper/lower flammability or explosive limits: no data available
- (k) Vapour pressure: not determined
- (I) Vapour density: not determined
- (m) Relative density: 1,09 g/cm3
- (n) Solubility(ies): soluble in water.
- (o) Partition coefficient: n-octanol/water: not determined
- (p) Auto-ignition temperature: no data available
- (q) Decomposition temperature: not determined
- (r) Viscosity: not determined
- (s) Explosive properties: not explosive
- (t) Oxidising properties. not oxidising.
- 9.2. Other information

No further information available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. **10.2. Chemical stability**

Stable under normal temperature conditions and recommended use. Stability: may affect the stability in environment that exposure to the light, high temperature.

10.3. Possibility of hazardous reactions

No dangerous reaction in normal use.

10.4. Conditions to avoid

Exposure to light and UV radiation before use.

UV curable hard varnish

10.5. Incompatible materials

Strong oxidising agents, strong acids, strong bases.

Hazardous decomposition products

Carbon oxides, sulfur oxides, nitrogen oxides, phosphorus oxides, other organic gases.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

This product is free solvent, carcinogenic material. The general damage is contact stimulation; excessive or repeated contact may stimulate skin; at the first beginning and long time short distance contact may stimulate eyes. The main irritant is acrylic esters. This product is a low toxicity, LD50>3000mg/kg

(a) acute toxicity: Based on available data, the classification criteria are not met

The product does not contain any ingredient classified as acute toxicity.

(b) skin corrosion/irritation: Causes skin irritation

(c) serious eye damage/irritation: Causes serious eye irritation

(d) respiratory or skin sensitisation: May cause an allergic skin reaction

(e) germ cell mutagenicity: Based on available data, the classification criteria are not met

(f) carcinogenicity: Based on available data, the classification criteria are not met

The product does not contain carcinogenic components

(g) reproductive toxicity: Based on available data, the classification criteria are not met

The product contains a reproductive toxicity component (see section 3.2).

(h) STOT-single exposure: May cause respiratory irritation.

(i) STOT-repeated exposure: Based on available data, the classification criteria are not met

The product does not contain components classified as repeated-exposure target organ toxicity

(j) aspiration hazard: Based on available data, the classification criteria are not met

The product does not contain any components classified as aspiration toxicity.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects

12. 2. Persistence and degradability
No data

12.3. Bioaccumulative potential
No data

12.4. Mobility in soil
No data

12.5. Results of PBT and vPvB assessment
Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects
Avoid directly into the pool of water or sewer before curing. It is typical polymer after curing, which is no direct damage to environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. Non-recyclable material is to be offered to a licensed disposal company. Contaminated packaging : In accordance with local and national regulations. Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

The product is a dangerous good according to the transport regulations (ADR / RID, ADN, IMDG, ICAO / IATA), but it is not covered by the regulations when transported in suitable, individual packaging or combination packaging up to 51 (special ADR / RID 375 instruction / IMDG Code 2.10.2.7./IATA special instruction A197). 14.1. UN-Number: 3082 14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (QUATERNARY AMMONIUM CHLORIDE POLYMERS, AQUEOUS SOLUTION) 14.3. Transport hazard class(es) 9

Classification code: M6

Label 9 + dangerous for the environment



Transport category: 3 Tunnel restriction code: hazard numbers: 90 14.4. Packing group III packaging information P001, PP1 - IBC03 - LP01 - R001 - MP19 tanker transport: LGBV - AT vehicle mobile tank / bulk transport: T4, TP1, TP29. 14.5. Environmental hazards Yes 14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling. 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable. Carriage in bulk is not permitted. Other shipping information: IMDG - EmS: F-A, S-F

SECTION 15: REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

According to the local regulation.

The components of this product are included in the following notification lists; are exempted, or otherwise meet requirements: EINECS/ELINCS/NLP (EU), DSL/NDSL (Kanada), KECI (Dél-Korea)

The ingredients of this product are not included on California's 65 list

15.2. Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

LIST OF RELEVANT H-PHRASES IN SECTION 3

H-Phrases

H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H335 May cause respiratory irritation.
H361f Suspected of damaging fertility.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects

The classification was prepared according to the 1272/2008/EK Regulation: based on calculation method

Data Sources: Manufacturer's Safety Data Sheet

Abbreviations:

Eye Irrit. Eye Irritation Skin Irrit. Skin Irritation Skin Sens. Skin sensitization STOT SE Specific Target Organ Toxicity (single exposure), Repr. Reproductive toxicity Aquatic Acute Aquatic Chronic

SCL: Specific Concentration limit EK / EU European community/European union

EGK European Economic Community **DNEL Derived No Effect Level PNEC Predicted No Effect Concentration** CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures / CAS Chemical Abstracts Service **UN / ENSZ United Nations** ADN Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure ADR Accord européen relatif au transport international des marchandises Dangereuses par Route RID Réglement international concernant le transport des marchandises dangereuses par chemin de fer IMDG International Maritime Code for Gangerous Goods MARPOL International Convention for the Prevention of Pollution From Ships **IBC** Intermediate Bulk Container IATA International Air Transport Association ICAO International Civil Aviation Organization PBT Persistent, Bioaccumulative, Toxic vPvB very Persistent, very Bioaccumulative

This product Safety Data Sheet provides health, safety, and regulatory information. The information contained in this Safety Data Sheet is based on data available to us at the date of issue, and is provided in good faith, and believed to be accurate and reliable at the date of issue, however, no warranty, express or implied is provided. The product is to be used in applications consistent. For any other uses, exposures should be evaluated so that the appropriate handling practices and training programs can be established to ensure safe working conditions and operations. It is the buyer's/user's responsibility to satisfy itself that the product is suitable for the intended use, and to ensure that its activities comply with all federal, state, provincial, or local laws and regulations. Regulatory requirements are subject to change and may differ between European Member States and Nations.Individuals handling this product should be informed of the recommended safety precautions and should have access to this information.