Safety Data Sheet according to Regulation (EC) * No. 878/2020

*Date of Compilation/Revision: 27.12.2020./30.11.2023.

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

1.1. Product identifier 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, Gyömrõi 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 Sens. 1 H317 May cause an allergic skin reaction

2.2. Label elements isobornyl acrylate

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



Signal Word Warning

Hazard Statements

H317 May cause an allergic skin reaction

Precautionary Statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

UFI: ND10-K0SU-Y004-ESKD

2.3. Other hazards

The product contains a candidate list component.

*SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

UV curable hard varnish

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 Sens. 1A H317 Index-No.: 607-756-00-6

Hazardous Substance(s): Diphenyl(2,4,6-trimethylbenzoyl)phosphineoxide (candidate list component) 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.

Ingestion

Rinse mouth. Get immediate medical attention.

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

May cause mild skin, eye and respiratory irritation. It may cause an allergic skin reaction in some sensitive individuals. Harmful if swallowed.

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.

Cool the endangered containers with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

*SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Avoid inhalation of vapours or mists.

The use of protective gloves is mandatory. Keep unnecessary personnel away. . Ensure adequate ventilation. Remove all sources of ignition.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Collect the spilled material.

6.3. Methods and materials for containment and cleaning up

If a small amount leaks, soak up with a cloth and dispose of the cloth safely. Stop the spillage if safe to do. Eliminate sources of ignition. Spilled material is contained and recovered if possible. Absorb residue with dry sand, earth or similar inert absorbent material and collect in barrels for later disposal. Wash the 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 direct contact with the product, ingestion and inhalation of vapors/spray. Do not use at high temperatures, in the presence of sparks and flames, or frozen. The use of protective gloves is mandatory. Contaminated work clothes must not be taken out of the workplace. After use, hands and affected skin surfaces must be thoroughly washed.

General occupational hygiene advice: General occupational hygiene measures are used to handle the product safely. Eating, drinking and smoking are prohibited in the workplace. Wash your hands thoroughly after handling and using the product. Remove the contaminated cloth and wash it before reuse.

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 use(s)

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

A local and/or general exhaust system is recommended to keep exposure as low as possible in order to Provide a safety shower and eyewash in the work area.

Personal protective equipment

Eve/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. Contaminated work clothes must not be taken out of the workplace. Remove the contaminated cloth and wash it before reuse. **Respiratory protection**

Avoid breathing vapors/spray. Where intensive steam or aerosol during use is formed, use the combined respiratory protection prescribed for organic substances.

Environmental exposure controls

Check emissions of the local exhaust system during the production in order to comply with environmental protection requirements

*SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- (a) Physical state liquid
- (b) Colour transparent, clear
- (c) Odour acrylic resin
- (d) Melting point/freezing point not determined
- (e) Boiling point or initial boiling point and boiling range not determined
- (f) Flammability non-flammable
- (g) Lower and upper explosion limit not determined
- (h) Flash point 105 C
- (i) Auto-ignition temperature not determined
- (j) Decomposition temperature not determined
- (k) pH 6,2
- (I) Kinematic viscosity not determined
- (m) Solubility miscible with water
- (n) Partition coefficient n-octanol/water (log value) Not applicable (mixture)
- (o) Vapour pressure not determined
- (p) Density and/or relative density 1,09 g/cm3
- (q) Relative vapour density not determined
- (r) Particle characteristics Not applicable for fluid.

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.

10.5. Incompatible materials

Strong oxidising agents, strong acids, strong bases.

10.6. Hazardous decomposition products

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

*SECTION 11: Toxicological information

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

(a) acute toxicity: Based on available data, the classification criteria are not met. LD50 (oral) >3000mg/kg

(b) skin corrosion/irritation: Based on available data, the classification criteria are not met.

(c) serious eye damage/irritation: Based on available data, the classification criteria are not met.

(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: Based on available data, the classification criteria are not met.

(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.

11.2. Information on other hazards

According to our current knowledge, it does not contain endocrine disrupting substances. The product has low toxicity, is free of solvents and carcinogens. The general damage is contact irritation, skin irritation caused by excessive or repeated contact. Acute or long-term contact may irritate the eyes. The irritating effect occurs primarily due to acrylic esters.

*SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met 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 No data 12.6. Endocrine disrupting properties According to our current knowledge, it does not contain endocrine disrupting substances. 12.7. Other adverse effects Avoid directly into the pool of water or sever before curing. It is typical polymer after curing

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

Hazardous waste. Waste hazard code: HP 13.

Since the product slightly damages the environment before and after use, there are no strict processing requirements

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. Contaminated packaging : In accordance with local and national regulations.

***SECTION 14: Transport information**

According the transport regulations (ADR/RID, ADN, IMDG, ICAO/IATA) the product is not a dangerous good,

14.1. UN number or ID number Not applicable

14.2. UN proper shipping name Not applicable

14.3. Transport hazard class(es) Not applicable

14.4. Packing group Not applicable

14.5. Environmental hazards No

14.6. Special precautions for user Observe the applicable safety data sheet.

14.7. Maritime transport in bulk according to IMO instruments Not applicable. Bulk delivery is not permitted.

***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

REACH XIV. Appendix: Candidate list materials

Material name	EC-No.	CAS-no.	Properties referred to in Article 57
Diphenyl(2,4,6-	278-355-8	75980-60-8	Toxic for reproduction (Article 57c)
trimethylbenzoyl)phosphineoxide			
	201-247-9	80-07-9	vPvB (Article 57e)
Bis(4-chlorophenyl)sulfone			

Regulation 1907/2006/EC of the European Parliament and of the Council (December 18, 2006) on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC, and Council Regulation 793/93/EEC, Commission Regulation 1488/94/EC, Council Directive 76/769/EEC, 91/155/EEC, 93/67/EEC, 93/105/EC and 2000 /21/EC on the repeal of Commission Directive (EEA-related text) (latest standardized edition: 17.12.2022)

Hazardous mixture notification (ECHA-PCN, EU): It happened.

Regulation 1272/2008/EC of the European Parliament and of the Council (December 16, 2008) on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006 (Text with EEA relevance)

(latest unified edition: 31.07.2023)

Commission Delegated Regulation (EU) 2020/1677 of 31 August 2020 to improve the feasibility of the health emergency response information requirements of Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures (Text related to the EEA)

15.2. Chemical safety assessment

Chemical safety assessment has not been carried out/ not required

*SECTION 16: Other information

LIST OF RELEVANT H-PHRASES IN SECTION 3

H-Phrases

H317 May cause an allergic skin reaction H361f Suspected of damaging fertility.

*Changes from the previous version

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

Data Sources:

Manufacturer's Safety Data Sheet

Abbreviations:

Skin Sens. Skin sensitization Repr. Reproductive toxicity

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 IMO International Maritime Organization IBC Intermediate Bulk Container IATA International Air Transport Association ICAO International Civil Aviation Organization PBT Persistent, Bioaccumulative, Toxic vPvB very Persistent, very Bioaccumulative ATE Acute Toxicity Estimate / body weight in kilograms EC₅₀ Effective concentration 50 % LC₅₀ Lethal Concentration 50 % NOEC No Observed-effect concentration LLNA Local Lymph Node Assay BCF / BKF Bioconcentration factor PCN Poison Centres Notification UFI Unique Formula Identifier EPC / EPT The European Parliament and the Council

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.