Safety Data Sheet according to Regulation (EC) No 830/2015

Date of Compilation/Revision: 22.08.2018.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE **COMPANY/UNDERTAKING**

1.1 Product identifiers: Clear varnish Glossy Solvent Based

Type of substance: CLP Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Solvent based, high-gloss finishing varnish for hobby. 1.3 Details of the supplier of the safety data sheet:

Pentacolor Ltd.

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:

Egészségügyi Toxikológiai Tájékoztató Szolgálat Address: 1096, Budapest, Nagyvárad tér 2., Hungary

tel: 06/80/20 11 99 (green number), 06/1/476 64 64 (during working hours)

SECTION 2. HAZARDS IDENTIFICATION

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

Flammable liquid 2 H225 Highly flammable liquid and vapour STOT SE 3 H336 May cause drowsiness or dizziness

2.2. Label elements:

Labelling according to Regulation (EC) No 1272/2008

Contains: iso-butyl acetate, isopropanol

Additional labelling:

Contains methyl methacrylate, n-butyl methacrylate. May produce an allergic reaction.

Hazard pictograms:



Signal Word: Danger

Hazard Statements:

H225 Highly flammable liquid and vapour H336 May cause drowsiness or dizziness

EUH066 Repeated exposure may cause skin dryness or cracking

Precautionary Statements

P102 Keep out of reach of children

P210 Keep away from heat/sparks/open flames/hot surfaces - No smoking

P242 Use only non-sparking tools

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

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

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P370+378 In case of fire: Us water spray for extinction

2.3 Other hazards:

The ingredients are not PBR 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.

Hazardous Substance(s): iso-butyl acetate

concentration: 10-25% EC-No.: 203-745-1 CAS-No.: 110-19-0 Index-No.: 607-026-00-7

Classification according to Regulation (EC) No 1272/2008: Flam. Liq. 2 H225, STOT SE 3 H336,

EUH066

Registration No.: 01-2119488971-22

Hazardous Substance(s): isopropanol

concentration: 5-10% EC-No.: 200-661-7 CAS-No.: 67-63-0 Index-No.: 603-117-00-0

Classification according to Regulation (EC) No 1272/2008: Flam. Liq. 2 H225, Eye Irrit. 2 H319,

STOT SE 3 H336

Registration No.: 01-2119457558-25-0000

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

SECTION 4. FIRST AID MEASURES

4.1 Description of necessary first-aid measures:

General advise:

Take off all contaminated clothing immediately.

Inhalation:

Provide fresh air. Seek medical treatment in case of troubles.

Eye contact:

Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and if necessary seek medical advice.

Skin contact:

Remove contaminated clothing. Wash skin thoroughly with soap and water. In case of complaints contact your doctor.

Ingestion:

Never give anything by mouth to an unconscious person. Immediately flush the mouth and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

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

May cause drowsiness or dizziness.

4.3 Indication of immediate medical attention and special treatment needed:

Symptomatic treatment..

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Alcohol resistant foam, CO₂, powders, water spray

Not to be used: High power water jet.

5.2 Special hazards arising from the substance or mixture

In case of fire carbon monoxide, carbon dioxide.

Vapours may form explosive mixtures with air. The vapours of the mixture can do significant distance to the ignition source and can back ignite.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective clothing. If possible, take container out of dangerous zone. Cool closed containers exposed to fire with water away Heating will lead to increased pressure and risk of fracture.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

All ignition sources must be removed if this can be safely accomplished. Use personal protective equipment. Avoid contact with eyes and skin. Ensure adequate ventilation. Avoid breathing vapours.

6.2 Environmental precautions

Do not allow to enter drains or watercourses.

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, and place in container for disposal according to local regulations (see section 13)...

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

Take precautionary measures against static discharge. Avoid open flames. Keep away from sources of ignition. - No smoking. Ensure adequate ventilation. Avoid contact with eyes, skin, clothing and breathing of its vapours. Containers should be kept closed. Do not eat, drink, smoke at work. Wash hands before breaks and at the end of work. For personal protection see Section 8.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local rules & regulations

Store in a dry, cold, well ventilated place away from sources of heat and direct sunlight. Keep away from sources of ignition. - No smoking. Keep away from food, drink and animal feedingstuffs. Keep away from foodstuffs, beverages and feed. Keep away from combustible materials, oxidizing materials, strong acids and base from water and moisture.

7.3 Specific end uses

See section 1.2

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

CAS 67-63-0 isopropanol: 200 ml/m3, 500 mg/m3 (TRGS 900)

DNEL:

iso-butyl acetate

worker: Long-term exposure - systemic effects , dermal: 4,95 mg/bw/d worker: Long-term exposure - systemic effects , inhalation: 243 mg/m3 consumer: Long-term exposure - systemic effects , dermal: 2,48 mg/bw/d consumer: Long-term exposure - systemic effects , inhalation: 60,3 mg/m3 consumer: Long-term exposure - systemic effects, oral: 2,48 mg/bw/d

DNEL

isopropanol

worker: Long-term exposure - systemic effects, dermal: 888 mg/kg/d worker: Long-term exposure - systemic effects , inhalation: 500 mg/m3 consumer: Long-term exposure - systemic effects , dermal: 319 mg/kg/d consumer: Long-term exposure - systemic effects , inhalation: 89 mg/m3 consumer: Long-term exposure - systemic effects, oral: 26 mg/kg/d

PNEC

iso-butyl acetate

freshwater: 0,17 mg/l marine water: 0,017 mg/l

STP: 200 mg/l

sediment (freshwater): 0,877 mg/kg dw sediment (marine water): 0,0877 mg/kg dw

soil: 0,0755 mg/kg dw

PNEC isopropanol

freshwater: 140,9 mg/l marine water: 140,9 mg/l

intermittent release: 140,9 mg/l

STP: 2.251 mg/l soil: 28 mg/kg oral: 160 mg/kg food sediment: 552 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Avoid contact with skin, clothing and breathing of its vapours. Wash hands before breaks and at the end of workday. Do not eat, drink or smoke when using this product. Containers should be kept closed. Take precautionary measures against static discharge. Keep away from sources of ignition and heat.

Personal protective equipment

Eye/face protection

Use safety eyewear designed to protect against splash of liquids

Skin protection

Protective gloves according to EN 374.

Glove Material:

- Nitrile rubber, layer thickness: (> = 0.35 mm), Breakthrough time: 8 h
- Butyl rubber, layer thickness: (> = 0.5 mm), Breakthrough time: 8 h
- Polycloroprene, layer thickness: (> = 0.5 mm), Breakthrough time: 4 h

For the protective gloves manufacturer's permeability and data on the breaking time must be taken into account.

Body Protection

Protective clothing it is recommended.

Respiratory protection

If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. (A)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

(a) Appearance: liquid, colourless

(b) Odour: : characteristic

(c) Odour threshold: No data available

(d) pH: not determined

(e) Melting point/freezing point: not applicable

(f) Initial boiling point and boiling range: not determined

(g) Flash point: 18 C (closed cup)

Clear varnish Glossy Solvent Based

Version number: 1.

- (h) Evaporation rate: not determined
- (i) Flammability (solid, gas): not applicable
- (j) Upper/lower flammability or explosive limits: not determined
- (k) Vapour pressure: not determined
- (I) Vapour density: not determined
- (m) Relative density: 0.8-0.98 g/cm3
- (n) Solubility(ies): miscible with water
- (o) Partition coefficient: n-octanol/water: not determined
- (p) Auto-ignition temperature: not determined
- (q) Decomposition temperature: not determined
- (r) Viscosity: not determined
- (s) Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- (t) Oxidising properties. no data

9.2. Other information

No further information available.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

No hazardous reactions can be expected under normal handling and storage

10.2 Chemical stability

Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction in normal use.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Combustible materials, oxidizing materials, strong acids and base from water and moisture.

10.6 Hazardous decomposition products

In case of fire carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

There are no data available on the preparation itself

- (a) acute toxicity: Based on available data, the classification criteria are not met
- (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: Contains methyl methacrylate, n-butyl methacrylate. May produce an allergic 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
- (g) reproductive toxicity: Based on available data, the classification criteria are not met
- (h) STOT-single exposure: May cause drowsiness or dizziness
- (i) STOT-repeated exposure: Based on available data, the classification criteria are not met
- (j) aspiration hazard: Based on available data, the classification criteria are not met

Acute toxicity oral

Components:

iso-butyl acetate:

LD50/rat: 13413 mg/kg (OECD 401)

isopropanol:

LD50/rat: 5840 mg/kg (OECD 401)

Acute toxicity inhalation

Components:

iso-butyl acetate:

LC50/rat/6h: >30 mg/l air (EPA OTS 798.6050)

isopropanol:

LC50/rat: > 25 mg/l/6h (OECD 403)

Acute toxicity dermal

Components: iso-butyl acetate:

LD50/rabbit: >17400 mg/kg (OECD 402)

isopropanol:

LD50 rabbit: 13900 mg/kg (OECD 402)

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

There are no data available on the preparation itself

Components: iso-butyl acetate:

LC50/96h: 17 mg/l (Oryzias Latipes), experimental value (OECD 203) EC50/72h: 25 mg/l (Daphnia Magna), experimental value (OECD 202)

LC50/72 h/algae: 370 mg/l (Pseudokirchnerella subcapitata), experimental value (OECD 201) NOEC/72h/algae: 95 mg/l (Pseudokirchnerella subcapitata), experimental value (OECD 201) aquatic invertebrates: NOEC/21 days: 23 mg/l (Daphnia magna reproduction test), experimental

value (OECD 211)

micro-organism EC10/6h: 487 mg/l (Pseudomonas putida) (DIN 38412-27)

EC50/6h: 1886 mg/l (Pseudomonas putida) (DIN 38412-27)

isopropanol:

Growth inhibition test, algae:

EC50 Green algae: 1.800 mg/l/7 days

Toxicity on daphnia:

EC50 Daphnia magna: 10.000 mg/L/48h.

Toxicity on fish:

LC50 Pimephales promelas: 9.640 mg/L/96h.

Terrestrial plant toxicity:

IK50 Lactuca sativa: 2.104 mg/kg/3 days 12.2 Persistence and degradability

Components: iso-butyl acetate:

81%, 20 days experimental value (OECD 301D)

isopropanol:

Readily biodegradable.

12.3 Bioaccumulative potential

Components: iso-butyl acetate:

low ability for bioaccumulation (Log Kow <=3)

BCF: 15,3 (calculated value)

n-octanol/water: 2,3 (25 C fok) (OECD 117)

isopropanol:

Bioaccumulation is not expected. (log P(o/w) < 1).

12.4 Mobility in soil

Components: iso-butyl acetate:

log Koc: 1,19 (SRC PCKOCWIN v2,0)

isopropanol:No data available.

12.5 Results of PBT and vPvB assessment

The ingredients are not PBR or vPvB substances.

12.6 Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Do not allow into drains or water courses.

Wastes and emptied containers should be disposed of in accordance with local regulations. Contaminated packaging: Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

SECTION 14. TRANSPORT INFORMATION

14.1. UN number: 1263

14.2. UN proper shipping name: PAINT14.3. Transport hazard class(es): 3

Classification code: F1



Label(s): 3

Road Tunnel Restrictions: D/E Transport category (1.1.3.6.): 2 Limited Quantity (LQ): 5L

Tank codes for ADR tanks: 640C

14.4. Packing group: II

14.5. Environmental hazards: No

14.6. Special precautions for user: Highly flammable Liquid

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable to the product being shipped.

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.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment has not been carried out.

SECTION 16. OTHER INFORMATION

Data Sources:

The previously-classified hazardous materials list Internet database of chemical substances Safety data sheets of components

The classification was prepared according to the 1272/2008/EK Regulation:

Flam. Liq. 2 H225 Based on the flashpoint value STOT SE 3 H336 based on calculation method

LIST OF RELEVANT H-PHRASES IN SECTION 3.

H-Phrases

225 Highly flammable liquid and vapour 319 Causes serious eye irritation 336 May cause drowsiness or dizziness EUH066 Repeated exposure may cause skin dryness or cracking

Abbreviations:

Eye Irrit. 2 Eye Irritation Category 2 Flam. Liq. 2 Flammable liquid Category 2 STOT SE 3 Specific Target Organ Toxicity (single exposure), Category 3 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.