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

Version number: 2.1

Date of Compilation/Revision: 03.10.2016./16.03.2020.

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

1.1 Product identifiers: Dye Solution, alcohol based

Type of substance: CLP Mixture

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

Solvent ink for hobby of adults.

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

1.4 For product safety information please contact: info@pentacolor.hu

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- Category 2 H225 Highly flammable liquid and vapour Eye Irrit. 2 H319 Causes serious eye irritation

2.2. Label elements:

Labelling according to Regulation (EC) No 1272/2008

Contains: ethanol, isopropyl alcohol, ethyl methyl ketone

Hazard pictograms:



Signal Word: Danger

Hazard Statements:

H225 Highly flammable liquid and vapour
H319 Causes serious eye irritation
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

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P233 Keep container tightly closed

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

P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

2.3 Other hazards:

The ingredients are not PBR or vPvB substances The material can irritate the eyes and respiratory tract. Vapour of a higher concentration may cause narcotism. Vapours may form explosive mixtures with air. If a large amount of product suddenly gets warm, it can occur, that the vapors of the sudden evaporative alcohol are in the presence of a source of ignition on the surface of the water flames up.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture:

Ethanol solution with other additions and Solvent Dyes. 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): ethanol (SCL: Eye Irrit. 2; C >= 50 %)

concentration: 85-90% EC-No.: 200-578-6 CAS-No.: 64-17-5 Index-No.: 603-002-00-5

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

Hazardous Substance(s): isopropyl alcohol

concentration: 3-3,5% 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. Lig. 2 H225, Eye Irrit. 2 H319,

STOT SE 3 H336

Registration No.: 01-2119457558-25-xxxx

Hazardous Substance(s): ethyl methyl ketone

concentration: < 3% EC-No.: 201-159-0 CAS-No.: 78-93-3 Index-No.: 606-002-00-3

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

STOT SE 3 H336, EUH066

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:

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation:

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.

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. If eye irritation persists: Get medical advice/attention.

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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. Rinse mouth with water. In case of complaints contact your doctor.

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

High concentrations of fumes, or if inhaled for an extended period, narcotic effect can occur. In the case of loss of consciousness contact a doctor. Causes serious eye irritation

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: Not known

5.2 Special hazards arising from the substance or mixture

In case of fire carbon monoxide, carbon dioxide,

If a large amount of product suddenly gets warm, it can occur, that the vapors of the sudden evaporative alcohol are in the presence of a source of ignition on the surface of the water flames up Vapours form explosive mixtures with air.

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 Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Stop the spillage if safe to do . Use personal protective equipment. Evacuate personnel to safe areas. Avoid contact with eyes and skin. Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8.

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). Place in a sealed container with spark-proof tools. Wash the contaminated area with plenty of water. 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

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). Place in a sealed container with spark-proof tools. Wash the contaminated area with plenty of water. Ensure adequate ventilation Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/light/.../equipment. Take precautionary measures against static discharge.

Avoid skin and eye contact. Avoid the inhalation of dust, particulates and spray mist arising from the application of this preparation. Smoking, eating and drinking should be prohibited in application area. The vapours can accumulate in the deeper places, or at the bottom in the storage tanks. In this case you can enter the plece only with sufficient breathing apparatus and under the supervision of another person. Wash hands before breaks and at the end of work.

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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, well ventilated place away from sources of heat and direct sunlight. Keep away from sources of ignition. Keep out of reach of children. Keep away from oxidizing agents. Keep away from foodstuffs, beverages and feed.

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 64-17-5 ethyl alcohol: 500 ml/m3, 960 mg/m3 (TRGS 900)

CAS 78-93-3 ethyl methyl ketone: 200 ml/m3, 600 mg/m3 (TRGS 900), 8 hours limit value: 600 mg/m³ (200 ppm), Short term limit value: 900 mg/m³ (300 ppm) Directive 2000/39/EC CAS 67-63-0 isopropyl alcohol: 200 ml/m3, 500 mg/m3 (TRGS 900)

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Do not eat, drink or smoke when using this product.

Personal protective equipment

Eye/face protection

Use safety eyewear designed to protect against splash of liquids. In the absence of tap water or running water, an eyewash container filled with water must be kept ready.

Skin protection

For prolonged or repeated handling, use gloves. Nitrile, butyl rubber (EN374)

Body Protection

Not required for normal use.

Respiratory protection

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

Environmental exposure controls

There are no specific requirements.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- (a) Appearance: liquid, Colour: according to the specification
- (b) Odour: : characteristic
- (c) Odour threshold: not determined
- (d) pH: not determined
- (e) Melting point/freezing point: not applicable
- (f) Initial boiling point and boiling range: > 78 C
- (g) Flash point: > 15 C
- (h) Evaporation rate: not determined
- (i) Flammability (solid, gas): not applicable (liquid)
- (j) Upper/lower flammability or explosive limits: not determined
- (k) Vapour pressure: not determined
- (I) Vapour density: not determined
- (m) Relative density: 0.8-0.9 g/cm3 (20 C)
- (n) Solubility(ies): soluble in water
- (o) Partition coefficient: n-octanol/water: not determined
- (p) Auto-ignition temperature: not self-igniting
- (a) Decomposition temperature: not determined
- (r) Viscosity: not determined
- (s) Explosive properties Vapours form explosive mixtures with air.
- (t) Oxidising properties. no data

9.2 Other safety information

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No data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Vapours form explosive mixtures with air.

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

Keep away from oxidizing agents.

10.6 Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product:

- (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: Causes serious eye irritation
- (d) respiratory or skin sensitisation: Based on available data, the classification criteria are not met
- (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: Based on available data, the classification criteria are not met
- (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

Components:

Ethanol:

Acute toxicity

LD50 Oral - rat - 3450 mg/kg

Ethanol: poisoning symptoms: dizziness, double vision, nausea

LC50 Inhalation - rat - 10 h - 2000 ppm

LD50 Oral - mouse - 7060 mg/kg

Ethyl methyl ketone

LD50 Oral - rat - > 2000 mg/kg

LD50 Dermal/hour/rat - > 2000 mg/kg

Skin corrosion/irritation

Ethanol: mild irritation (rabbit) Ethyl methyl ketone: no data

Serious eye damage/eye irritation

Ethanol: strong irritation (rabbit),

Ethyl methyl ketone: strong irritation (rabbit)

Respiratory or skin sensitization

No sensitizing effects known.

Germ cell mutagenicity

Ethanol: genetic changes can occur. Ethyl methyl ketone:: non-mutagenic

Carcinogenicity

Ethanol: no data available

Ethyl methyl ketone: non-carcinogen

Reproductive toxicity

Ethanol: the consumption of ethanol during pregnancy can affect the unborn child, resulting in spontaneous miscarriage, birth defects, or developmental problems may result.

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Ethyl methyl ketone: Animal studies suggest that this substance may have a toxic effect on human reproduction

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Specific target organ toxicity - single exposure

Ethanol: no data available

Ethyl methyl ketone vapour may cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure

Ethyl methyl ketone: No data

Aspiration hazard no data available

Potential health effects

Ethanol: chronic ingestion may cause a cirrhosis of the liver, effect on the nervous system and affects the glands function. At high concentrations of exposure, ethanol vapors may irritate the eyes, skin and respiratory system, loss of coordination of ataxia, drowsiness, narcosis stupor and unconsciousness, decreased perception and lack of coordination can occur.

Ethyl methyl ketone: may affect the upper respiratory tract and central nervous system, may cause skin dryness or cracking.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

There are no data available on the preparation itself

Components

Ethyl methyl ketone: idus melanotus 4600 mg/l LC50 Ethyl methyl ketone: Daphnia magna 7060 mg/l EC50

12.2 Persistence and degradability

The biodegradability of surface-active substances corresponds to the 648/2004/EC regulation.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

Water miscible in all proportions.

12.5 Results of PBT and vPvB assessment

Contains no heavy metals and polychlorinated hydrocarbons.

12.6 Other adverse effects

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

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.

The contaminated packaging after cleaning can be reused..

Waste key number: 07 01 04*- other organic solvents, washing liquids and mother liquors Packaging: 15 01 10* packaging residues containing or contaminated by hazardous substances.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number: 1170

14.2 UN proper shipping name

ADR/RID, IMDG, IATA: UN 1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Transport hazard class(es)

ADR/RID: Class 3, Code: F1 IMDG: Class 3, Code -

IATA: Class 3

14.4 Packing group

ADR/RID, IMDG, IATA: II

14.5 Environmental hazards

Marine Pollutant No

14.6 Special precautions for user Highly flammable liquid

Land transport (ADR/RID)

Warning board: ADR/RID: Kemmler-number 33, UN number 1170

Hazard label 3

Tunnel restriction code: D/E Sea transport (IMDG)

EmS: F-E, S-E Special provisions -Air transport (IATA)

Special provisions -

PAX: 353 CAO: 364

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

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

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According to the local regulation.

Restrictions according to REACH Annex XVII.

The ingredients are not listed

List of substances subject to authorization (Annex XIV.)

The ingredients are not listed

SEVESO

7.b) Flammable liquids

Storage class: 3A Flammable liquids

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 Estimation based on th adata of components Eye Irrit. 2 H319 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

Changes from the previous version: Item 2. 4. 7.

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

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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.