LCR Hallcrest

Revision: 13 May 2020

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Chameleon UV Screen Ink

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

- Use of the substance/mixture: Manufacture of temperature-indicating products and temperature-sensitive decorative effects.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: LCR Hallcrest
- Address of Manufacturer: Riverside Buildings,
  Dock Road,
  Connah's Quay,
  Deeside,
  Flintshire, CH5 4DS,
  Wales. U.K.
- Telephone: +44 (0) 1244 817107
- Email: Sales@lcrhallcrest.com

1.4 Emergency telephone number

- Emergency Telephone: +44 (0) 1244 818348

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- CLP: Resp. Sens. 1, Skin Sens. 1, Skin Irrit. 2, Eye Irrit. 2

2.2 Label elements

- Signal Word: Warning
- Hazard statements
  Causes skin irritation.
  Causes serious eye irritation.
  May cause an allergic skin reaction.
  Harmful to aquatic life with long lasting effects.
- Precautionary statements
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Wear protective gloves/protective clothing/eye protection/face protection.
  In case of inadequate ventilation wear respiratory protection.
  Avoid release to the environment.

2.3 Other hazards

SECTION 2: Hazards identification (....)

- Contains: 2-Propenoic acid reaction products with pentaerythritol
  Propylidynetrimethanol, ethoxylated, esters with acrylic acid

SECTION 3: Composition/information on ingredients

3.2 Mixtures

- Propylidynetrimethanol, ethoxylated, esters with acrylic acid
  CAS Number: 28961-43-5
  EC Number: 500-066-5
  Concentration: 20 - 25%
  Categories: Eye Irrit. 2, Skin Sens. 1
- hexamethylene diacrylate; hexane-1,6-diol diacrylate
  CAS Number: 13048-33-4
  EC Number: 235-921-9
  Concentration: 15 -20%
  Categories: Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1
  Symbols: GHS07
  H Statements: H315;H319;H317
  Water Hazard Class (Company): Not Classified
- 2-propenoic acid reaction products with pentaerythritol
  CAS Number: 1245638-61-2
  EC Number:
  Concentration: 1 - 2%
  Categories: Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1
  REACH Registration Number: 01-2119490003-49
  H Statements: H302;H315;H318;H317;H411
  Water Hazard Class (Company): 2
- pentaerythritol triacrylate
  CAS Number: 3524-68-3
  EC Number: 222-540-8
  Concentration: 1 - 2%
  Categories: Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1
  Symbols: GHS07
  H Statements: H315;H319;H317
  Water Hazard Class (Company): Not Classified
- Solvent naphtha (petroleum), light arom.
  CAS Number: 64742-95-6
  EC Number: 265-199-0
  Concentration: <1%
  Categories: Asp. Tox. 1
  H Statements: H335;H336;H304;H411
  Water Hazard Class (Official): 2
- phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

SECTION 3: Composition/information on ingredients (....)

CAS Number:	162881-26-7
EC Number:	423-340-5
Concentration:	1 -2%
Categories:	Skin Sens. 1
Symbols:	GHS07
H Statements:	H317;H413
Water Hazard Class (Company):	Not Classified

- acrylic acid, monoester with propane-1,2-diol

CAS Number:	25584-83-2
EC Number:	247-118-0
Concentration:	<0.5%
Categories:	Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1
Symbols:	GHS06;GHS05
H Statements:	H331;H311;H301;H314;H317
Water Hazard Class (Company):	Not Classified

- Color developer

CAS Number:	Proprietary
EC Number:	Proprietary
Concentration:	1 -5%
Categories:	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3
Symbols:	WARNING
H Statements:	H319, H315, H335

SECTION 4: First aid measures

4.1 Description of first aid measures

- Wash contaminated clothing before reuse.
- Contact with eyes
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  If eye irritation persists: Get medical advice/attention.
- Contact with skin
  IF ON SKIN: Wash with plenty of soap and water.
  If skin irritation occurs: Get medical advice/attention.
  If skin irritation or rash occurs: Get medical advice/attention.
- Ingestion
  Do not induce vomiting
- Inhalation
  If experiencing respiratory symptoms: Call a POISON CENTER/doctor/

4.2 Most important symptoms and effects, both acute and delayed

- The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

SECTION 4: First aid measures (....)

- There are no data available on the mixture itself. The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See sections 2 and 3 for details. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in nonallergic contact dermatitis and absorption through the skin. Acrylate components of the mixture have irritating
properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. May cause allergic skin reactions with repeated exposure. If splashed in the
eyes, the liquid may cause irritation and reversible damage. The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. Ingestion may cause nausea, weakness and central nervous system effects.

4.3 Indication of any immediate medical attention and special treatment needed

- IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions

5.2 Special hazards arising from the substance or mixture

- May give off noxious and toxic fumes in a fire

5.3 Advice for firefighters

- Wear suitable respiratory protection

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8

6.2 Environmental precautions

- Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

- Absorb spillage in suitable inert material
- Remove contaminated material to safe location for subsequent disposal

6.4 Reference to other sections

- For disposal refer to section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Wash hands thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves/protective clothing/eye protection/face protection.
- In case of inadequate ventilation wear respiratory protection.
- Wash contaminated clothing before reuse.
- Dispose of contents/container to hazardous waste

7.2 Conditions for safe storage, including any incompatibilities

SECTION 7: Handling and storage (....)

- Keep container tightly closed
- Store at ambient temperature

7.3 Specific end use(s)

- No information available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- There are no recommended or established controls for this product
- Propylidynetrimethanol, ethoxylated, esters with acrylic acid
  DNEL (dermal): 0.8 mg/kg Long Term - Workers
  DNEL (inhalational): 16.2 mg/m3 Long Term - Workers
- hexamethylene diacrylate; hexane-1,6-diol diacrylate
  DNEL (dermal): 2.77 mg/kg Long Term - Workers
  DNEL (inhalational): 24.48 mg/m3 Long Term - Workers
- 2-propenoic acid reaction products with pentaerythritol
  DNEL (inhalational): 7.35 mg/m3 - Long Term - Workers
- phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
  DNEL (dermal): 3.3 mg/kg Long term - Workers
  DNEL (inhalational): 21 mg/m3 Long term - Workers

8.2 Exposure controls

- Contaminated work clothing should not be allowed out of the workplace.
- Appropriate engineering controls
  Ensure adequate ventilation
- Personal protective equipment
  Wear suitable protective clothing, including eye/face protection and gloves (PVC are recommended)
- Eye / face protection
  Safety goggles with lateral shielding (DIN EN 166)
- Skin protection - hand protection
  Wear disposable gloves
- Respiratory protection
  In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Paste
- Auto-ignition point - not known
- Boiling point - not known
- Density - not known

SECTION 9: Physical and chemical properties (....)

- Evaporation rate - not applicable
- Fat solubility - not known
- Flash point - not applicable
- Melting point - not applicable
- Odour: Characteristic odour
- Partition coefficient : n-Octanol/water - not known
- pH - not applicable
- Vapour density - not known
- Vapour pressure - not known
- Water solubility - not applicable

9.2 Other information

- No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

- No hazardous reactions known if used for its intended purpose

10.2 Chemical stability

- Stable

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- No information available

10.5 Incompatible materials

- Keep away from strong alkalis, free radical initiators, peroxides, reactive metals.

10.6 Hazardous decomposition products

- Burning produces obnoxious and irritating fumes.
- Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- There are no data available on the mixture itself. The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See sections 2 and 3 for details. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in nonallergic contact dermatitis and absorption through the skin. Acrylate components of the mixture have irritating
properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. May cause allergic skin reactions with repeated exposure. If splashed in the
eyes, the liquid may cause irritation and reversible damage. The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. Ingestion may cause nausea, weakness and central nervous system effects.

- Propylidynetrimethanol, ethoxylated, esters with acrylic acid
  LD50 (dermal, rabbit): >13 g/kg

SECTION 11: Toxicological information (....)

- hexamethylene diacrylate; hexane-1,6-diol diacrylate
  LD50 (oral, rat): >5 g/kg

- Solvent naphtha (petroleum), light arom.
  LD50 (oral, rat): 8400 mg/kg

  Acute toxicity
  No information available

  Skin corrosion/irritation
  Irritating to skin

  Respiratory or skin sensitisation
  May cause sensitisation by skin contact.

  Germ cell mutagenicity
  No evidence of mutagenic effects

  Carcinogenicity
  IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

  Reproductive toxicity
  No information available

  STOT-single exposure
  No information available

  STOT-repeated exposure
  No information available

  Aspiration hazard
  No information available

SECTION 12: Ecological information

There are no data available on the mixture itself. This material is harmful to aquatic life with long lasting effects. Do not empty into drains or watercourses. See Sections 2 and 3 for details.

12.1 Toxicity

- No information available

12.2 Persistence and degradability

- hexamethylene diacrylate; hexane-1,6-diol diacrylate
  Readily biodegradable

- 2-propenoic acid reaction products with pentaerythritol
  Readily biodegradable

- phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
  Not readily biodegradable

12.3 Bioaccumulative potential

- Propylidynetrimethanol, ethoxylated, esters with acrylic acid
  Low bioaccumulation potential

- hexamethylene diacrylate; hexane-1,6-diol diacrylate
  Low bioaccumulation potential

- 2-propenoic acid reaction products with pentaerythritol
  Low bioaccumulation potential

SECTION 12: Ecological information (....)

- phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
  Low bioaccumulation potential
- Solvent naphtha (petroleum), light arom.
  Will bioaccumulate
- acrylic acid, monoester with propane-1,2-diol
  Low bioaccumulation potential

12.4 Mobility in soil

- immiscible with water

12.5 Results of PBT and vPvB assessment

- No information available

12.6 Other adverse effects

- No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Absorb spillage in inert material and shovel up
- Dispose of contents/container to hazardous waste

SECTION 14: Transport information

Not classified as hazardous for transport

14.1 UN number

- UN No.: Not applicable

14.2 Proper Shipping Name

- Proper Shipping Name: Not applicable

14.3 Transport hazard class(es)

- Hazard Class: Not applicable

14.4 Packing group

- Packing Group: Not applicable

14.5 Environmental hazards

- Not Classified

14.6 Special precautions for user

- Not Classified

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not Classified

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SECTION 15: Regulatory information (....)

- COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No1907/2006 of the European Parliament and of the Council on 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.
- Water Hazard Class (Company): 1

15.2 Chemical safety assessment

- A chemical safety assessment (CSA) for this product has not yet been completed
- All components are either, pre-registered, registered or exempt under REACH.

SECTION 16: Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H301: Toxic if swallowed. H302: Harmful if swallowed. H304: May be fatal if swallowed and enters airways. H311: Toxic in contact with skin. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H319: Causes serious eye irritation. H331: Toxic if inhaled. H335: May cause respiratory irritation. H336: May cause drowsiness or dizziness. H411: Toxic to aquatic life with long lasting effects. H413: May cause long lasting harmful effects to aquatic life.

This information supplied in this Safety Data Sheet is designed only as guidance for the safe use and storage of the product. This information is correct to teh best of our knowledge and belief at the date of publication however no guarentee is made to its accuracy. This information only relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.

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