

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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Chameleon UV Rotary Screen Ink Bis A Free

Revision 2

Revision date 2016-01-19

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

1.1. Product identifier

Product name	Chameleon UV Rotary Screen Ink Bis A Free
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [SU7] Printing and reproduction of recorded media; [PC18] Ink and toners;
Description	Thermochromic pigment dispersion in UV curing resin.

1.3. Details of the supplier of the safety data sheet

Company	LCR Hallcrest Ltd
Address	Riverside Buildings Dock Road Connah's Quay Flintshire CH5 4DS United Kingdom
Web	www.lcrhallcrest.com
Telephone	+44 (0) 1244 817107
Fax	+44 (0)1244 818502
Email	sales@lcrhallcrest.com

Intended use


	Manufacture of temperature-indicating products and temperature-sensitive decorative effects.
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC	Xi; R36-43 Symbols: Xi: Irritant.
Main hazards	Irritating to eyes. May cause sensitisation by skin contact.
2.1.2. Classification - EC 1272/2008	Skin Irrit. 2: H315; Skin Sens. 1: H317;

2.2. Label elements

Hazard pictograms	
Signal Word	Warning
Hazard Statement	Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1: H317 - May cause an allergic skin reaction.
Precautionary Statement: Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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2.2. Label elements

Precautionary Statement: Response	P302+P352 - IF ON SKIN: Wash with plenty of water/ . P321 - Specific treatment (see on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to approved waste disposal plant or contractor.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
Ethoxylated (3) Trimethylolpropane Triacrylate		28961-43-5				Xi; R36-43	
Colour developer						Xi; R36/37/38	
2-Hydroxy-2-methylpropiophenone		7473-98-5				Xn; R22	

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
Ethoxylated (3) Trimethylolpropane Triacrylate		28961-43-5				Skin Irrit. 2: H315; Skin Sens. 1: H317;	
Colour developer						Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335;	
2-Hydroxy-2-methylpropiophenone		7473-98-5				Acute Tox. 4: H302;	

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. Seek medical attention.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Skin contact	Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	Seek medical attention if irritation or symptoms persist. DO NOT INDUCE VOMITING.

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

Inhalation	Irritating to respiratory system. Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
Eye contact	Irritating to eyes.
Skin contact	Irritating to skin.
Ingestion	Ingestion may cause nausea and vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Inhalation	Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system. Seek medical attention if irritation or symptoms persist.
Eye contact	Irritating to eyes. Seek medical attention if irritation or symptoms persist.
Skin contact	Irritating to skin. Seek medical attention if irritation or symptoms persist.
Ingestion	Keep the affected person warm and at rest. Seek medical attention if irritation or symptoms persist.

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Carbon oxides.
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5.2. Special hazards arising from the substance or mixture

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5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes.
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5.3. Advice for firefighters

	Wear suitable respiratory equipment when necessary.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Ensure adequate ventilation of the working area. Wear suitable protective equipment.
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6.2. Environmental precautions

	Do not allow product to enter drains. Prevent further spillage if safe.
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6.3. Methods and material for containment and cleaning up

	Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.
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6.4. Reference to other sections

	For disposal see section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.
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7.2. Conditions for safe storage, including any incompatibilities

	Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.
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7.3. Specific end use(s)

	Apply a barrier cream before handling the product. Avoid contact with eyes. Avoid contact with skin.
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SECTION 8: Exposure controls/personal protection

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
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8.2.2. Individual protection measures	Wear chemical protective clothing.
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Eye / face protection	Approved safety goggles.
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Skin protection - Handprotection	Chemical resistant gloves (PVC).
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Respiratory protection	Wear: Suitable respiratory equipment.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Various colours according to type.
Odour	Characteristic
pH	Not applicable.
Melting point	Not applicable.
Freezing Point	No data available
Initial boiling point	No data available
Flash point	Not applicable.
Evaporation rate	Not applicable.
Relative density	1.1
Fat Solubility	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Explosive properties	No data available
Oxidising properties	No data available
Solubility	Immiscible in water

9.2. Other information

Surface tension	No data available
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SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable.
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10.2. Chemical stability

	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

	No Significant Hazard.
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10.4. Conditions to avoid

	No Significant Hazard.
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10.5. Incompatible materials

	No Significant Hazard.
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10.6. Hazardous decomposition products

	Burning produces obnoxious and irritating fumes.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	May cause sensitisation by skin contact.
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11.1.4. Toxicological Information

2-Hydroxy-2-methylpropiophenone	Dermal Rat LD50: 6929 mg/kg	Oral Rat LD50: 1694 mg/kg
Colour developer	Oral Rat LD50: 3400 mg/kg	
Ethoxylated (3) Trimethylolpropane Triacrylate	Dermal Rabbit LD50: >13 gm/kg	

SECTION 12: Ecological information

12.3. Bioaccumulative potential

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Partition coefficient

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Further information

	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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SECTION 13: Disposal considerations

General information

	Dispose of in compliance with all local and national regulations.
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SECTION 14: Transport information

14.1. UN number

	The product is not classified as dangerous for carriage.
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14.2. UN proper shipping name

	The product is not classified as dangerous for carriage.
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14.3. Transport hazard class(es)

	The product is not classified as dangerous for carriage.
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14.4. Packing group

	The product is not classified as dangerous for carriage.
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14.5. Environmental hazards

	The product is not classified as dangerous for carriage.
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14.6. Special precautions for user

	The product is not classified as dangerous for carriage.
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

	The product is not classified as dangerous for carriage.
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Further information

	The product is not classified as dangerous for carriage.
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SECTION 15: Regulatory information

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

Regulations	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 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.
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Further information

	For this product a chemical safety assessment was not carried out.
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SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas: 9 - 9.1. Information on basic physical and chemical properties (PH). 9 - 9.1. Information on basic physical and chemical properties (Initial boiling point). 9 - 9.1. Information on basic physical and chemical properties (Melting point). 9 - 9.1. Information on basic physical and chemical properties (Flash point).
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Other information

	<p>9 - 9.1. Information on basic physical and chemical properties (Autoignition temperature).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Explosive properties).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Oxidising properties).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Relative density).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Evaporation rate).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Freezing Point).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Fat Solubility).</p> <p>9 - 9.2. Other information (Partition coefficient).</p> <p>9 - 9.2. Other information (Surface tension).</p>
Text of risk phrases in Section 3	<p>R22 - Harmful if swallowed.</p> <p>R36/37/38 - Irritating to eyes, respiratory system and skin.</p> <p>R36 - Irritating to eyes.</p> <p>R43 - May cause sensitisation by skin contact.</p>
Text of Hazard Statements in Section 3	<p>Skin Irrit. 2: H315 - Causes skin irritation.</p> <p>Skin Sens. 1: H317 - May cause an allergic skin reaction.</p> <p>Eye Irrit. 2: H319 - Causes serious eye irritation.</p> <p>STOT SE 3: H335 - May cause respiratory irritation.</p> <p>Acute Tox. 4: H302 - Harmful if swallowed.</p>

Further information

	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only 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.</p>
HMIS LABELLING	<p>All components are TSCA compliant.</p> <p>HEALTH 1, FLAMMABILITY 0, PERSONAL PROTECTION : C. PHYSICAL HAZARD 0.</p>