

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 1/4

Chameleon UV Flexo Ink

Revision 0
Revision date 2011-04-15

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

1.1. Product identifier

Product name	Chameleon UV Flexo Ink
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Description	Thermochromic pigment dispersion in UV curing resin.
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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; R38-41-43 R52/53 Symbols: Xi: Irritant.
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Main hazards	Irritating to skin. Risk of serious damage to eyes. May cause sensitisation by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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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
Dipropylene glycol diacrylate		57472-68-1			20 - 30%	Xi; R38-41-43
Acrylate					1 - 10%	Xi; R36/37/38
4,4'-Isopropylidenediphenol	604-030-00-0	80-05-7	201-245-8		1 - 10%	Repr. Cat. 3; R62 Xi; R37-41 R43 R52
HDMAP		7473-98-5	231-272-0		1 - 10%	Xn; R22 N; R50/53
Hexane-1,6-diol diacrylate	607-109-00-8	13048-33-4	235-921-9		1 - 10%	Xi; R36/38 R43
Formaldehyde...% (Formaldehyde)	605-001-00-5	50-00-0	200-001-8		0 - 0.5%	Carc. Cat. 3; R40 T; R23/24/25 C; R34 R43

SECTION 4: First aid measures

Chameleon UV Flexo Ink

Revision 0

Revision date 2011-04-15

4.1. Description of first aid measures

Inhalation	Irritating to respiratory system. Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system. Move the exposed person to fresh air. Seek medical attention.
Eye contact	Irritating to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Skin contact	Irritating to skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist. DO NOT INDUCE VOMITING.

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Carbon oxides.
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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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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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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure Limit Values

Formaldehyde...% (Formaldehyde)	WEL 8-hr limit ppm: 2	WEL 8-hr limit mg/m3: 2.5
	WEL 15 min limit ppm: 2	WEL 15 min limit mg/m3: 2.5

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Wear chemical protective clothing.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Chemical resistant gloves (PVC).

Chameleon UV Flexo Ink

Revision 0

Revision date 2011-04-15

8.2. Exposure controls

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

State	Liquid
Colour	Various colours according to type.
Odour	Characteristic
Solubility	Immiscible in water

SECTION 10: Stability and reactivity

10.2. Chemical stability

	Stable under normal conditions.
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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

4,4'-Isopropylidenediphenol	Oral Rat LD50: 4240 mg/kg Dermal Rabbit LD50: 3 mL/kg	Oral Mouse LD50: 2500 mg/kg
Dipropylene glycol diacrylate	Oral Rat LD50: 4600 mg/kg	Dermal Rabbit LD50: >2 gm/kg
Formaldehyde...%	Inhalation Rat LC50/2H h: 250 ppm Oral Mouse LD50: 500 mg/kg Dermal Rabbit LD50: 270 mg/kg	Oral Rat LD50: 500 mg/kg Inhalation Mouse LC50/2H h: 505 mg/m3
HDMAP	Dermal Rat LD50: 6929 mg/kg	Oral Rat LD50: 1694 mg/kg

SECTION 12: Ecological information

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

Further information

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

Labelling

Symbols	The product is classified in accordance with 67/548/EEC. Xi: Irritant. 
Risk phrases	R38 - Irritating to skin. R41 - Risk of serious damage to eyes. R43 - May cause sensitisation by skin contact. R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chameleon UV Flexo Ink

Revision 0

Revision date 2011-04-15

Labelling	
Safety phrases	<p>S24 - Avoid contact with skin.</p> <p>S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</p> <p>S37/39 - Wear suitable gloves and eye/face protection.</p>
SECTION 16: Other information	
Other information	
Text of risk phrases in Section 3	<p>R22 - Harmful if swallowed.</p> <p>R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.</p> <p>R34 - Causes burns.</p> <p>R36/37/38 - Irritating to eyes, respiratory system and skin.</p> <p>R36/38 - Irritating to eyes and skin.</p> <p>R37 - Irritating to respiratory system.</p> <p>R38 - Irritating to skin.</p> <p>R40 - Limited evidence of a carcinogenic effect.</p> <p>R41 - Risk of serious damage to eyes.</p> <p>R43 - May cause sensitisation by skin contact.</p> <p>R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>R52 - Harmful to aquatic organisms.</p> <p>R62 - Possible risk of impaired fertility.</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>
	<p>All components are TSCA compliant.</p>
HMIS LABELLING	HEALTH 1, FLAMMABILITY 0, PERSONAL PROTECTION : C. PHYSICAL HAZARD 0.