

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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UV Offset Thermochromic Ink Bis A Free

Revision 0

Revision date 2015-05-22

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

1.1. Product identifier

Product name UV Offset Thermochromic Ink Bis A Free

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 Thermographic Measurements Ltd

Address
Riverside Buildings
Dock Road
Connah's Quay
Flintshire CH5 4DS
United Kingdom

Web www.t-m-c.com

Telephone +44 (0)1244 818348

Fax +44 (0)1244 818502

Email sales@t-m-c.com

Email address of the competent person chris@t-m-com

1.4. Emergency telephone number

Emergency telephone number +44 (0)1244 818348

Hours 09.00 to 17.00

Intended use

Manufacture of temperature-indicating products and temperature-sensitive decorative effects.

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; Eye Irrit. 2: H319;

2.2. Label elements

Hazard pictograms



Signal Word

Warning

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2.2. Label elements

Hazard Statement	Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1: H317 - May cause an allergic skin reaction. Eye Irrit. 2: H319 - Causes serious eye irritation.
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.
Precautionary Statement: Response	P302+P352 - IF ON SKIN: Wash with plenty of water/ . P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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. P337+P313 - If eye irritation persists: Get medical advice/attention.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to

2.3. Other hazards

Other hazards	No data available.
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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	M-factor.
Ethoxylated (3) Trimethylolpropane Triacrylate Colour developer		28961-43-5			20 - 30% Xi; R36-43 1 - 10% Xi; R36/37/38		
2,2-bis(Acryloyloxymethyl)butyl acrylate HDMAP	607-111-00-9	15625-89-5	239-701-3		1 - 10% Xi; R36/38 R43 1 - 10% 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 Colour developer		28961-43-5			20 - 30% Skin Irrit. 2: H315; Skin Sens. 1: H317; 1 - 10% Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335;		
2,2-bis(Acryloyloxymethyl)butyl acrylate HDMAP	607-111-00-9	15625-89-5	239-701-3		1 - 10% Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317; 1 - 10% Acute Tox. 4: H302;		

Refer to Section 3.1.

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	Irritant, moderate respiratory.
Eye contact	Irritating to eyes.

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

Skin contact	Avoid contact with skin. Irritating to skin. May cause sensitisation by skin contact.
Ingestion	Ingestion may cause nausea and vomiting.

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

Inhalation	Coughing, difficulty in breathing. If breathing is difficult give oxygen.
Eye contact	Seek medical attention if irritation or symptoms persist.
Skin contact	May cause sensitisation by skin contact. Wash off immediately with plenty of soap and water.

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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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)

	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
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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.
8.2.2. Individual protection measures	Wear chemical protective clothing.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Chemical resistant gloves (PVC).
Respiratory protection	Wear:.. Suitable respiratory equipment.

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Appearance	Paste
Colour	Various colours according to type.
Odour	Mild
Solubility	Immiscible in water

SECTION 10: Stability and reactivity

10.1. Reactivity

No significant hazard as supplied.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No Significant Hazard.

10.4. Conditions to avoid

No Significant Hazard.

10.5. Incompatible materials

Alkalis.

10.6. Hazardous decomposition products

Formaldehyde may be generated and other harmful fumes.

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

2,2-bis(Acryloyloxymethyl)butyl acrylate	Oral Rat LD50: 5190 uL/kg	Dermal Rabbit LD50: 5170 mg/kg
Colour developer	Oral Rat LD50: 3400 mg/kg	
Ethoxylated (3) Trimethylolpropane Triacrylate	Dermal Rabbit LD50: >13 gm/kg	
HDMAP	Dermal Rat LD50: 6929 mg/kg	Oral Rat LD50: 1694 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

HDMAP	Daphnia EC50/48h: 119.0000 mg/l	Algae IC50/72h: 1.9500 mg/l
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12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6. Other adverse effects

No data is available on this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Absorb with inert, absorbent material.

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General information	
	Dispose of in compliance with all local and national regulations.
Disposal methods	
	Do not empty into drains; dispose of this material and its container in a safe way.
SECTION 14: Transport information	
ADR/RID	
	The product is not classified as dangerous for carriage.
IMDG	
	The product is not classified as dangerous for carriage.
IATA	
	The product is not classified as dangerous for carriage.
Further information	
	The product is not classified as dangerous for carriage.
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.
15.2. Chemical safety assessment	
	For this product a chemical safety assessment was not carried out.
SECTION 16: Other information	
Other information	
Text of risk phrases in Section 3	R22 - Harmful if swallowed. R36/37/38 - Irritating to eyes, respiratory system and skin. R36/38 - Irritating to eyes and skin. R36 - Irritating to eyes. R43 - May cause sensitisation by skin contact.
Text of Hazard Statements in Section 3	Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1: H317 - May cause an allergic skin reaction. Eye Irrit. 2: H319 - Causes serious eye irritation. STOT SE 3: H335 - May cause respiratory irritation. Acute Tox. 4: H302 - Harmful if swallowed.
Further information	
	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.