

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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Thermostar UV Bis A free Flexo Ink

Revision 1

Revision date 2015-05-27

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

1.1. Product identifier

Product name Thermostar UV Bis A free Flexo Ink

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 chrisc@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; R43
Symbols: Xi: Irritant.

Main hazards 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

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			10 - 20%	Xi; R36-43	
2-Hydroxy-2-methylpropiophenone		7473-98-5			1 - 10%	Xi; R36/37/38	
					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			10 - 20%	Skin Irrit. 2: H315; Skin Sens. 1: H317;	
2-Hydroxy-2-methylpropiophenone		7473-98-5			1 - 10%	Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335;	
					1 - 10%	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	May cause irritation 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	Seek medical attention if irritation or symptoms persist.
Eye contact	Seek medical attention if irritation or symptoms persist.

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

Skin contact	May cause sensitisation by skin contact. Seek medical attention if irritation or symptoms persist.
Ingestion	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

	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. Chemical resistant gloves.
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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

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
Solubility	Immiscible in water

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

	Strong oxidising agents.
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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

Further information

	No constituent has yet been assigned a risk phrase pertaining to ecological effects (R50 to R59) or the symbol N.
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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

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14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

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.

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.

SECTION 16: Other information

Other information

Revision

This document differs from the previous version in the following areas:.

- 2 - 2.1.2. Classification - EC 1272/2008.
- 2 - Hazard pictograms.
- 2 - Signal Word.
- 2 - Precautionary Statement: Prevention.
- 2 - Precautionary Statement: Response.
- 2 - Precautionary Statement: Disposal.
- 4 - Skin contact.
- 4 - Eye contact.
- 4 - Inhalation.
- 4 - Ingestion.
- 4 - Inhalation.
- 4 - Eye contact.
- 4 - Skin contact.
- 4 - Ingestion.
- 4 - Inhalation.
- 4 - Eye contact.
- 4 - Skin contact.
- 4 - Ingestion.
- 6 - 6.4. Reference to other sections.
- 7 - 7.3. Specific end use(s).
- 10 - 10.4. Conditions to avoid.
- 10 - 10.3. Possibility of hazardous reactions.
- 10 - 10.6. Hazardous decomposition products.
- 10 - 10.5. Incompatible materials.
- 12 - 12.1. Toxicity.
- 15 - Regulations.

Text of risk phrases in Section 3

- R22 - Harmful if swallowed.
- R36/37/38 - Irritating to eyes, respiratory system 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.

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Other information

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.

All components are TSCA compliant.

HMIS LABELLING

HEALTH 1, FLAMMABILITY 0, PERSONAL PROTECTION : C. PHYSICAL HAZARD 0.