

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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THERMOSTAR WB GRAVURE BIS A FREE INK

Revision 7

Revision date 2015-05-05

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

1.1. Product identifier

Product name THERMOSTAR WB GRAVURE BIS A FREE INK

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

Description Temperature sensitive, colour change ink.

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 Sens. 1: H317;

2.2. Label elements

Hazard pictograms	
Signal Word	Warning
Hazard Statement	Skin Sens. 1: H317 - May cause an allergic skin reaction.

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2.2. Label elements

Precautionary Statement: Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. 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/ . P321 - Specific treatment (see on this label). P333+P313 - If skin irritation or rash occurs: 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.
Isopropanol	603-117-00-0	67-63-0	200-661-7		1 - 10%	F; R11 Xi; R36 R67	
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	

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
Isopropanol	603-117-00-0	67-63-0	200-661-7		1 - 10%	Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336;	
Formaldehyde...%	605-001-00-5	50-00-0	200-001-8		0 - 0.5%	Carc. 1B: H350; Muta. 2: H341; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; Skin Corr. 1B: H314; Skin Sens. 1: H317;	

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

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

Inhalation	Coughing, difficulty in breathing.
Eye contact	Irritating to eyes. Seek medical attention if irritation or symptoms persist.
Skin contact	May cause sensitisation by skin contact.
Ingestion	If you feel unwell, seek medical advice (show the label where possible). Ingestion may cause nausea and vomiting.

SECTION 5: Firefighting measures

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5.1. Extinguishing media

Carbon oxides.

5.2. Special hazards arising from the substance or mixture

Burning produces irritating, toxic and obnoxious fumes.

5.3. Advice for firefighters

Wear suitable respiratory equipment when necessary.

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.

6.2. Environmental precautions

Do not allow product to enter drains. Prevent further spillage if safe.

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.

6.4. Reference to other sections

For disposal see section 13.

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.

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.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure Limit Values

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
	WEL 8-hr limit mg/m3 total - inhalable dust:	WEL 15 min limit mg/m3 total - inhalable dust:
	WEL 8-hr limit mg/m3 total - respirable dust:	WEL 15 min limit mg/m3 total - respirable dust:
	Isopropanol	WEL 8-hr limit ppm: 400
	WEL 15 min limit ppm: 500	WEL 15 min limit mg/m3: 1250
	WEL 8-hr limit mg/m3 total - inhalable dust:	WEL 15 min limit mg/m3 total - inhalable dust:
	WEL 8-hr limit mg/m3 total - respirable dust:	WEL 15 min limit mg/m3 total - respirable dust:

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Ensure adequate ventilation of the working area.

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8.2. Exposure controls

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

Appearance	Liquid
Colour	Various colours according to type.
Odour	Characteristic
Initial boiling point	100
Solubility	Miscible in water

SECTION 10: Stability and reactivity

10.1. Reactivity

	No data available.
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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

	Protect from frost.
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10.5. Incompatible materials

	Alkalis.
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10.6. Hazardous decomposition products

	Formaldehyde may be generated and other harmful 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

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
Isopropanol	Oral Rat LD50: 5000 mg/kg Dermal Rabbit LD50: 12800 mg/kg	Oral Mouse LD50: 3600 mg/kg

SECTION 12: Ecological information

12.2. Persistence and degradability

	No data is available on this product.
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12.3. Bioaccumulative potential

	No data is available on this product.
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12.4. Mobility in soil

	No data is available on this product.
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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.

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 at hazardous or special waste collection point.

SECTION 14: Transport information**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****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.
- 9 - 9.1. Information on basic physical and chemical properties (Colour).
- 9 - 9.1. Information on basic physical and chemical properties (Initial boiling point).
- 9 - 9.1. Information on basic physical and chemical properties (Solubility).
- 12 - 12.1. Toxicity.

Text of risk phrases in Section 3

R11 - Highly flammable.

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.

R34 - Causes burns.

R36 - Irritating to eyes.

R40 - Limited evidence of a carcinogenic effect.

R43 - May cause sensitisation by skin contact.

R67 - Vapours may cause drowsiness and dizziness.

Text of Hazard Statements in Section 3

Flam. Liq. 2: H225 - Highly flammable liquid and vapour.

Eye Irrit. 2: H319 - Causes serious eye irritation.

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Other information

STOT SE 3: H336 - May cause drowsiness or dizziness.

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.

HMIS LABELLING

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