

## SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 1/6

### THERMOSTAR WATER BASED SCREEN INK 1410

Revision 4

Revision date 2015-05-27

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

##### 1.1. Product identifier

**Product name** THERMOSTAR WATER BASED SCREEN INK 1410

##### 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

<b>Company</b>	Thermographic Measurements Ltd
<b>Address</b>	Riverside Buildings Dock Road Connah's Quay Flintshire CH5 4DS United Kingdom
<b>Web</b>	www.t-m-c.com
<b>Telephone</b>	+44 (0)1244 818348
<b>Fax</b>	+44 (0)1244 818502
<b>Email</b>	sales@t-m-c.com
<b>Email address of the competent person</b>	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

<b>2.1.1. Classification - 1999/45/EC</b>	Xi; R43 Symbols: Xi: Irritant.
<b>Main hazards</b>	May cause sensitisation by skin contact.
<b>2.1.2. Classification - EC 1272/2008</b>	Skin Sens. 1: H317; Eye Irrit. 2: H319;

##### 2.2. Label elements

##### Hazard pictograms



##### Signal Word

Warning

##### Hazard Statement

Skin Sens. 1: H317 - May cause an allergic skin reaction.  
Eye Irrit. 2: H319 - Causes serious eye irritation.

## THERMOSTAR WATER BASED SCREEN INK 1410

Revision 4

Revision date 2015-05-27

## 2.2. Label elements

<b>Precautionary Statement: Prevention</b>	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.
<b>Precautionary Statement: Response</b>	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). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.
<b>Precautionary Statement: Disposal</b>	P501 - Dispose of contents/container to

## 2.3. Other hazards

<b>Other hazards</b>	No data available.
----------------------	--------------------

## 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.
4,4'-Isopropylidenediphenol	604-030-00-0	80-05-7	201-245-8		1 - 10%	Repr. Cat. 3; R62 Xi; R37-41 R43 R52	
Formaldehyde		50-00-0	200-001-8		0 - 0.2%	T; R23/24/25 C; R34 Xn; R40 Xi; R43	

## EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
4,4'-Isopropylidenediphenol	604-030-00-0	80-05-7	201-245-8		1 - 10%	Repr. 2: H361f; STOT SE 3: H335; Eye Dam. 1: H318; Skin Sens. 1: H317;	
Formaldehyde		50-00-0	200-001-8		0 - 0.2%	Acute Tox. 3: H301; Acute Tox. 3: H311; Skin Corr. 1B: H314; Skin Sens. 1: H317; Acute Tox. 3: H331; Carc. 2: H351;	

Refer to Section 3.1.

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

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

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

<b>Inhalation</b>	Irritant, moderate respiratory.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	May cause sensitisation by skin contact. Avoid contact with skin.
<b>Ingestion</b>	Ingestion may cause nausea and vomiting.

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

<b>Inhalation</b>	Coughing, difficulty in breathing.
<b>Eye contact</b>	Irritating to eyes. Seek medical attention if irritation or symptoms persist.
<b>Skin contact</b>	May cause sensitisation by skin contact.

## THERMOSTAR WATER BASED SCREEN INK 1410

Revision 4

Revision date 2015-05-27

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

Ingestion	If you feel unwell, seek medical advice (show the label where possible). Ingestion may cause nausea and vomiting.
-----------	---

## SECTION 5: Firefighting measures

## 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

4,4'-Isopropylidenediphenol	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 10
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	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:
	Formaldehyde	WEL 8-hr limit ppm: 2
	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:

## 8.2. Exposure controls

## THERMOSTAR WATER BASED SCREEN INK 1410

Revision 4

Revision date 2015-05-27

## 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

Appearance	Viscous liquid.
Odour	Characteristic
Initial boiling point	100
Flammability (solid, gas)	N/A
Explosive properties	N/A

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

	No data available.
--	--------------------

## 10.2. Chemical stability

	Stable under normal conditions.
--	---------------------------------

## 10.3. Possibility of hazardous reactions

	No Significant Hazard.
--	------------------------

## 10.4. Conditions to avoid

	Protect from frost.
--	---------------------

## 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.
----------------	--

## 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
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

## SECTION 12: Ecological information

## 12.1. Toxicity

4,4'-Isopropylidenediphenol	Green algae EC50/96h: 3.1 Fathead minnows LC50/96h: 4.6	Daphnia LC50/48h: 10.2
-----------------------------	--	------------------------

## 12.2. Persistence and degradability

	No data is available on this product.
--	---------------------------------------

## THERMOSTAR WATER BASED SCREEN INK 1410

Revision 4

Revision date 2015-05-27

**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.

**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.

**Further information**

CLP classification of Formaldehyde on this SDS is in accordance with COMMISSION REGULATION (EU) 2015/491 of 23 March 2015 amending Regulation (EU) No 605/2014, the new/updated entries for harmonised classification and labelling of substances apply from 1 January 2016.

**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: Storage.
- 2 - Precautionary Statement: Disposal.
- 12 - 12.1. Toxicity.
- 15 - Further information.

## THERMOSTAR WATER BASED SCREEN INK 1410

Revision 4

Revision date 2015-05-27

Other information	
<b>Text of risk phrases in Section 3</b>	R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed. R34 - Causes burns. R37 - Irritating to respiratory system. R40 - Limited evidence of a carcinogenic effect. R41 - Risk of serious damage to eyes. R43 - May cause sensitisation by skin contact. R52 - Harmful to aquatic organisms. R62 - Possible risk of impaired fertility.
<b>Text of Hazard Statements in Section 3</b>	Skin Sens. 1: H317 - May cause an allergic skin reaction. Eye Dam. 1: H318 - Causes serious eye damage. STOT SE 3: H335 - May cause respiratory irritation. Repr. 2: H361f - Suspected of damaging fertility. Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Carc. 2: H351 - Suspected of causing cancer .
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.
<b>HMIS LABELLING</b>	HEALTH 1, FLAMMABILITY 0, PHYSICAL HAZARD 0. PERSONAL PROTECTION: E.