

## SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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### MC153-14

Revision 6

Revision date 2015-05-13

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

##### 1.1. Product identifier

**Product name** MC153-14

##### 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); [SU24] Scientific research and development; [PC9a] Coatings and paints, thinners, paint removers; [PROC7] Industrial spraying; [ERC8a] Wide dispersive indoor use of processing aids in open systems; [AC1] Vehicles;

**Description** Temperature indicating colour change paint.

##### 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

Temperature measurement and thermal mapping.

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

**2.1.1. Classification - 1999/45/EC** Xn; R20/21 Xi; R43 R10  
Symbols: Xn: Harmful.

**Main hazards** Flammable. Harmful by inhalation and in contact with skin. May cause sensitisation by skin contact.

**2.1.2. Classification - EC 1272/2008** Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317; Eye Irrit. 2: H319;


##### 2.2. Label elements

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## 2.2. Label elements

Hazard pictograms	
Signal Word	Warning
Hazard Statement	Flam. Liq. 3: H226 - Flammable liquid and vapour. 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	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting// equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. 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/ . P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P370+P378 - In case of fire: Use to extinguish.
Precautionary Statement: Storage	P403+P235 - Store in a well-ventilated place. Keep cool.
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.
2-methoxy-1-methylethyl acetate	607-195-00-7	108-65-6	203-603-9	01-2194759129-00	30 - 40%	R10	
Xylene	601-022-00-9	1330-20-7	215-535-7	01-2119488216-32	10 - 20%	R10 Xn; R20/21 Xi; R38	
MC150-12 Pigment					10 - 20%	Xn; R21/22 Xi; R36-43	
Ethylbenzene	601-023-00-4	100-41-4	202-849-4	01-2119489370-00	1 - 10%	F; R11 Xn; R20	

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## 3.2. Mixtures

## EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
2-methoxy-1-methylethyl acetate	607-195-00-7	108-65-6	203-603-9	01-2194759129-00	30 - 40%	Flam. Liq. 3: H226;	
Xylene	601-022-00-9	1330-20-7	215-535-7	01-2119488216-32	10 - 20%	Flam. Liq. 3: H226; Acute Tox. 4: H332; Acute Tox. 4: H312; Skin Irrit. 2: H315;	
MC150-12 Pigment					10 - 20%	Acute Tox. 4: H302; Acute Tox. 4: H312; Skin Sens. 1: H317; Eye Irrit. 2: H319;	
Ethylbenzene	601-023-00-4	100-41-4	202-849-4	01-2119489370-00	1 - 10%	Flam. Liq. 2: H225; Acute Tox. 4: H332;	

## 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	DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label.

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

Inhalation	Harmful by inhalation. Inhalation may cause nausea and vomiting. May cause dizziness and headache.
Eye contact	May cause irritation to eyes.
Skin contact	May cause irritation to skin.
Ingestion	Harmful if swallowed. Ingestion is irritating to the respiratory tract and may cause damage to the central nervous system. Ingestion may cause nausea and vomiting.

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

Inhalation	If you feel unwell, seek medical advice (show the label where possible). Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
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	May cause irritation to skin. Repeated or prolonged exposure may cause dermatitis. Seek medical attention if irritation or symptoms persist.
Ingestion	If swallowed, seek medical advice immediately and show this container or label.

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media

	Use as appropriate: Carbon dioxide (CO <sub>2</sub> ), Dry chemical, Foam.
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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. Eliminate all sources of ignition. 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. 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. Use explosion proof equipment. Keep away from sources of ignition - No smoking. 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.

## 7.3. Specific end use(s)

Do not spray on naked flame or any other incandescent material.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1. Exposure Limit Values

2-methoxy-1-methylethyl acetate	WEL 8-hr limit ppm: 50 WEL 15 min limit ppm: 100 WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: -	WEL 8-hr limit mg/m3: 274 WEL 15 min limit mg/m3: 548 WEL 15 min limit mg/m3 total inhalable dust: - WEL 15 min limit mg/m3 total respirable dust: -
Ethylbenzene	WEL 8-hr limit ppm: 100 WEL 15 min limit ppm: 125 WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: -	WEL 8-hr limit mg/m3: 441 WEL 15 min limit mg/m3: 552 WEL 15 min limit mg/m3 total inhalable dust: - WEL 15 min limit mg/m3 total respirable dust: -
MC150-12 Pigment	WEL 8-hr limit ppm: - WEL 15 min limit ppm: - WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: -	WEL 8-hr limit mg/m3: 0.1 as cobalt WEL 15 min limit mg/m3: 0.1 as cobalt WEL 15 min limit mg/m3 total inhalable dust: - WEL 15 min limit mg/m3 total respirable dust: -
Xylene	WEL 8-hr limit ppm: 50 WEL 15 min limit ppm: 100 WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: -	WEL 8-hr limit mg/m3: 220 WEL 15 min limit mg/m3: 441 WEL 15 min limit mg/m3 total inhalable 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.

## 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

Self-contained breathing apparatus. Wear protective clothing.

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**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	Liquid
Colour	Purple / mauve
Odour	Mild
Initial boiling point	140
Flash point	40
Flammability (solid, gas)	Flammable
Relative density	1.16
Solubility	Slightly soluble in water

**9.2. Other information**

VOC (Volatile organic compounds)	654
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**SECTION 10: Stability and reactivity****10.1. Reactivity**

	Avoid sparks, flames, heat and sources of ignition.
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**10.2. Chemical stability**

	Stable under normal conditions.
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**10.3. Possibility of hazardous reactions**

	Oxidising agents.
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**10.4. Conditions to avoid**

	Heat, sparks and open flames.
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**10.5. Incompatible materials**

	No Significant Hazard.
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**10.6. Hazardous decomposition products**

	Burning produces obnoxious and irritating fumes.
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**SECTION 11: Toxicological information****11.1.4. Toxicological Information**

2-methoxy-1-methylethyl acetate	Oral Rat LD50: 8532 mg/kg	Dermal Rabbit LD50: >5 gm/kg
Ethylbenzene	Inhalation Rat LC50/2H h: 55000 mg/m <sup>3</sup> Inhalation Mouse LC50/2H h: 35500 mg/m <sup>3</sup>	Oral Rat LD50: 3500 mg/kg Dermal Rabbit LD50: 17800 uL/kg
Xylene	Inhalation Rat LC50/4H h: 5000 ppm Oral Mouse LD50: 2119 mg/kg	Oral Rat LD50: 4300 mg/kg Dermal Rabbit LD50: >1700 mg/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****13.1. Waste treatment methods**

	Dispose of this material and its container to hazardous or special waste collection point.
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**General information**

	Dispose of in compliance with all local and national regulations.
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**SECTION 14: Transport information****Hazard pictograms**

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## Hazard pictograms



## 14.1. UN number

UN1263

## 14.2. UN proper shipping name

PAINT

## 14.3. Transport hazard class(es)

ADR/RID 3

Subsidiary risk -

IMDG 3

Subsidiary risk -

IATA 3

Subsidiary risk -

## 14.4. Packing group

Packing group III

## 14.5. Environmental hazards

Environmental hazards No

Marine pollutant No

## ADR/RID

Hazard ID 30

Tunnel Category (D/E)

## IMDG

EmS Code F-E S-E

## IATA

Packing Instruction (Cargo) 366

Maximum quantity 220 L

Packing Instruction (Passenger) 355

Maximum quantity 60 L

## 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.
	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning 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:.

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## Other information

	<p>2 - 2.1. Classification of the substance or mixture.  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 - Risk phrases.  15 - Safety phrases.</p>
<b>Text of risk phrases in Section 3</b>	<p>R10 - Flammable  R11 - Highly flammable.  R20/21 - Harmful by inhalation and in contact with skin.  R20 - Harmful by inhalation.  R21/22 - Harmful in contact with skin and if swallowed.  R36 - Irritating to eyes.  R38 - Irritating to skin.  R43 - May cause sensitisation by skin contact.</p>
<b>Text of Hazard Statements in Section 3</b>	<p>Flam. Liq. 3: H226 - Flammable liquid and vapour.  Acute Tox. 4: H312 - Harmful in contact with skin.  Skin Irrit. 2: H315 - Causes skin irritation.  Acute Tox. 4: H332 - Harmful if inhaled.  Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin  Skin Sens. 1: H317 - May cause an allergic skin reaction.  Eye Irrit. 2: H319 - Causes serious eye irritation.  Flam. Liq. 2: H225 - Highly flammable liquid and vapour.</p>
<b>Maximum content of VOC</b>	654.

## 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>
	All components are TSCA compliant.
<b>HMIS LABELLING</b>	HEALTH 1, FLAMMABILITY 3, PHYSICAL HAZARD 0.