

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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MC150-12

Revision 2

Revision date 2015-05-13

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

1.1. Product identifier

Product name	MC150-12
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC9a] Coatings and paints, thinners, paint removers; [PROC7] Industrial spraying; [ERC5] Industrial use resulting in inclusion into or onto a matrix; [AC2] Machinery, mechanical appliances, electrical/electronic articles;
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	chrisc@t-m-com

1.4. Emergency telephone number

Emergency telephone number	+44 (0)1244 818348 Hours 09.00 to 17.00
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Intended use

	Temperature measurement and thermal mapping.
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture


2.1.1. Classification - 1999/45/EC	Xn; R20/21 Xi; R38-43 R10 Symbols: Xn: Harmful.
Main hazards	Flammable. Harmful by inhalation and in contact with skin. Irritating to 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;

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.
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. 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. 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	20 - 30%	R10 Xn; R20/21 Xi; R38	
MC150-12 Pigment					1 - 10%	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	

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	20 - 30%	Flam. Liq. 3: H226; Acute Tox. 4: H332; Acute Tox. 4: H312; Skin Irrit. 2: H315;	
MC150-12 Pigment					1 - 10%	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;	

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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. May cause dermatitis.
Ingestion	Harmful if swallowed. Ingestion may cause nausea and vomiting. Ingestion is irritating to the respiratory tract and may cause damage to the central nervous system.

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

Inhalation	Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
Eye contact	May cause irritation to eyes. Seek medical attention if irritation or symptoms persist.
Skin contact	If you feel unwell, seek medical advice (show the label where possible).
Ingestion	If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting measures**5.1. Extinguishing media**

	Use as appropriate: Carbon dioxide (CO ₂), 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.
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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. Use explosion proof equipment. Keep away from sources of ignition - No smoking. 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.
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7.3. Specific end use(s)

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7.3. Specific end use(s)

Do not eat, drink or smoke in areas where this product is used or stored. Do not spray on naked flame or any other incandescent material. Ensure adequate ventilation of the working area.
Restricted to professional users.

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.
8.2.3. Environmental exposure controls	Appropriate local exhaust ventilation is required.

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	Purple / mauve
Odour	Mild
Autoignition temperature	315
Initial boiling point	140
Flash point	35
Upper Explosive Limit	10
Lower Explosive Limit	1.1
Solubility	Slightly miscible in water

9.2. Other information

Specific gravity	1.17
VOC (Volatile organic compounds)	560

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

	Oxidising agents.
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10.4. Conditions to avoid

	Heat, sparks and open flames.
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10.5. Incompatible materials

	Keep away from food, drink and animal feedingstuffs.
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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 ³ Inhalation Mouse LC50/2H h: 35500 mg/m ³	Oral Rat LD50: 3500 mg/kg Dermal Rabbit LD50: 17800 µL/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

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 available.
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12.6. Other adverse effects

	No data available.
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Further information	
	No data is available on this product.

SECTION 13: Disposal considerations
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13.1. Waste treatment methods	
	Dispose of this material and its container to hazardous or special waste collection point.

General information	
	Dispose of in compliance with all local and national regulations.

SECTION 14: Transport information
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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	33
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

Further information	
	Tunnel Code : 3 D/E.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	
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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations	<p>This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.</p> <p>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.</p>
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15.2. Chemical safety assessment

	For this product a chemical safety assessment was not carried out.
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SECTION 16: Other information**Other information**

Revision	<p>This document differs from the previous version in the following areas:.</p> <p>2 - 2.1. Classification of the substance or mixture.</p> <p>2 - 2.1.2. Classification - EC 1272/2008.</p> <p>2 - Hazard pictograms.</p> <p>2 - Signal Word.</p> <p>2 - Precautionary Statement: Prevention.</p> <p>2 - Precautionary Statement: Response.</p> <p>2 - Precautionary Statement: Storage.</p> <p>2 - Precautionary Statement: Disposal.</p> <p>12 - 12.1. Toxicity.</p> <p>15 - Risk phrases.</p> <p>15 - Safety phrases.</p>
Text of risk phrases in Section 3	<p>R10 - Flammable</p> <p>R11 - Highly flammable.</p> <p>R20/21 - Harmful by inhalation and in contact with skin.</p> <p>R20 - Harmful by inhalation.</p> <p>R21/22 - Harmful in contact with skin and if swallowed.</p> <p>R36 - Irritating to eyes.</p> <p>R38 - Irritating to skin.</p> <p>R43 - May cause sensitisation by skin contact.</p>
Text of Hazard Statements in Section 3	<p>Flam. Liq. 3: H226 - Flammable liquid and vapour.</p> <p>Acute Tox. 4: H312 - Harmful in contact with skin.</p> <p>Skin Irrit. 2: H315 - Causes skin irritation.</p> <p>Acute Tox. 4: H332 - Harmful if inhaled.</p> <p>Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin</p> <p>Skin Sens. 1: H317 - May cause an allergic skin reaction.</p> <p>Eye Irrit. 2: H319 - Causes serious eye irritation.</p> <p>Flam. Liq. 2: H225 - Highly flammable liquid and vapour.</p>
Maximum content of VOC	560.

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. All components TSCA compliant.</p>
HMIS LABELLING	<p>All components are TSCA compliant.</p> <p>HEALTH 1, FLAMMABILITY 3, PHYSICAL HAZARD 1. PERSONAL PROTECTION: G.</p>