

## SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 1/7

### SC458

Revision 2

Revision date 2015-05-06

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

##### 1.1. Product identifier

Product name	SC458
--------------	-------

##### 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; [SU24] Scientific research and development; [PC9a] Coatings and paints, thinners, paint removers; [PROC7] Industrial spraying;
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
----------------------------	--

##### Intended use

	For professional use only in scientific research and development. 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; R38 R10 Symbols: Xn: Harmful.
Main hazards	Flammable. Harmful by inhalation and in contact with skin. Irritating to skin.
2.1.2. Classification - EC 1272/2008	Flam. Liq. 3: H226; Skin Irrit. 2: H315;


##### 2.2. Label elements

## SC458

Revision 2

Revision date 2015-05-06

## 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.
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. P264 - Wash thoroughly after handling. 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. 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	
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;	
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.

## SC458

Revision 2

Revision date 2015-05-06

**4.1. Description of first aid measures**

Ingestion	Ingestion is irritating to the respiratory tract and may cause damage to the central nervous system. 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.

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

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	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.
--	--

**5.2. Special hazards arising from the substance or mixture**

	Burning produces irritating, toxic and obnoxious fumes. Vapour may travel considerable distance to source of ignition and flash back.
--	---

**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. Eliminate all sources of ignition. 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. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.
--	---

**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**

## SC458

Revision 2

Revision date 2015-05-06

## 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: -
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.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Green
Odour	Mild
Initial boiling point	140
Flash point	33
Vapour pressure	No data available
Vapour density	No data available

## Water solubility

	Slightly miscible in water.
--	-----------------------------

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

	Avoid sparks, flames, heat and sources of ignition.
--	---

## 10.2. Chemical stability

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

## 10.3. Possibility of hazardous reactions

	Oxidising agents.
--	-------------------

## SC458

Revision 2

Revision date 2015-05-06

## 10.4. Conditions to avoid

Heat, sparks and open flames.

## 10.5. Incompatible materials

Oxidising agents.

## 10.6. Hazardous decomposition products

Burning produces obnoxious and irritating fumes.

## 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/m3 Inhalation Mouse LC50/2H h: 35500 mg/m3	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

## Further information

An environmental hazard cannot be eliminated in the event of unprofessional handling or disposal.  
Do not allow product to enter drains.

## SECTION 13: Disposal considerations

## 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

## 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

## SC458

Revision 2

Revision date 2015-05-06

## 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

## SECTION 15: Regulatory information

## 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>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.</p>
-------------	---

## Further information

	For this product a chemical safety assessment was not carried out.
--	--

## SECTION 16: Other information

## Other information

Revision	<p>This document differs from the previous version in the following areas:.</p> <ul style="list-style-type: none"> <li>1 - Product Use.</li> <li>1 - Restricted use.</li> <li>2 - 2.1. Classification of the substance or mixture.</li> <li>2 - 2.1.2. Classification - EC 1272/2008.</li> <li>2 - Hazard pictograms.</li> <li>2 - Signal Word.</li> <li>2 - Precautionary Statement: Prevention.</li> <li>2 - Precautionary Statement: Response.</li> <li>2 - Precautionary Statement: Storage.</li> <li>2 - Precautionary Statement: Disposal.</li> <li>9 - 9.1. Information on basic physical and chemical properties (Initial boiling point).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Flash point).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Vapour pressure).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Vapour density).</li> <li>11 - 11.1.4. Toxicological Information.</li> <li>12 - 12.1. Toxicity.</li> <li>15 - Risk phrases.</li> <li>16 - Maximum content of VOC.</li> </ul>
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>

## SC458

Revision 2

Revision date 2015-05-06

**Other information**

<b>Text of Hazard Statements in Section 3</b>	R38 - Irritating to skin.
	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.
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.	

**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.
--	--