

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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Wet & Reveal Solvent Screen Ink

Revision 3

Revision date 2015-07-13

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

1.1. Product identifier

Product name	Wet & Reveal Solvent Screen Ink
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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); [SU7] Printing and reproduction of recorded media; [PC18] Ink and toners;
Description	Solvent based ink with a colour that is changed by contact with water.

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

Intended use	Manufacture of printed water sensitive articles.
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture


2.1.1. Classification - 1999/45/EC	Xn; R65 Xi; R37 R10-52/53-66-67 Symbols: Xn: Harmful.
Main hazards	Flammable. Irritating to respiratory system. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.
2.1.2. Classification - EC 1272/2008	Flam. Liq. 3: H226; Asp. Tox. 1: H304; STOT SE 3: H335; STOT SE 3: H336; Aquatic Chronic 3: H412;

2.2. Label elements

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2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Flam. Liq. 3: H226 - Flammable liquid and vapour. Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways. STOT SE 3: H335 - May cause respiratory irritation. STOT SE 3: H336 - May cause drowsiness or dizziness. Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
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. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P310 - IF SWALLOWED: IF SWALLOWED: Immediately call a POISON CENTER/doctor/ . P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 - Call a POISON CENTER/doctor/ /if you feel unwell. P331 - Do NOT induce vomiting. P370+P378 - In case of fire: Use to extinguish.
Precautionary Statement: Storage	P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up.
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.
Light aromatic naptha solvent		64742-95-6			20 - 30%	Xn; R65 Xi; R37 N; R51/53 R10-66-67	
Cyclohexanone	606-010-00-7	108-94-1	203-631-1		10 - 20%	R10 Xn; R20	
2-methoxy-1-methylethyl acetate	607-195-00-7	108-65-6	203-603-9	01-2194759129-00	1 - 10%	R10	
4-Hydroxy-4-methylpentan-2-one	603-016-00-1	123-42-2	204-626-7		1 - 10%	Xi; R36	
1,2-Benzenedicarboxylic Acid, Nis (Methylcyclohexyl) Ester		27987-25-3			1 - 10%	Xi; R38	

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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.
Light aromatic naphtha solvent		64742-95-6			20 - 30%	EUH066; Flam. Liq. 3: H226; Asp. Tox. 1: H304; STOT SE 3: H335; STOT SE 3: H336; Aquatic Chronic 2: H411;	
Cyclohexanone	606-010-00-7	108-94-1	203-631-1		10 - 20%	Flam. Liq. 3: H226; Acute Tox. 4: H332;	
2-methoxy-1-methylethyl acetate	607-195-00-7	108-65-6	203-603-9	01-2194759129-00	1 - 10%	Flam. Liq. 3: H226;	
4-Hydroxy-4-methylpentan-2-one	603-016-00-1	123-42-2	204-626-7		1 - 10%	Eye Irrit. 2: H319;	
1,2-Benzenedicarboxylic Acid, Nis (Methylcyclohexyl) Ester		27987-25-3			1 - 10%	Skin Irrit. 2: H315;	

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	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 (CO2), Dry chemical, Foam.
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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.
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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.

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 8-hr limit mg/m3: 274
	WEL 15 min limit ppm: 100	WEL 15 min limit mg/m3: 548
	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:
4-Hydroxy-4-methylpentan-2-one	WEL 8-hr limit ppm: 50	WEL 8-hr limit mg/m3: 241
	WEL 15 min limit ppm: 75	WEL 15 min limit mg/m3: 362
	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:
Cyclohexanone	WEL 8-hr limit ppm: 10	WEL 8-hr limit mg/m3: 10
	WEL 15 min limit ppm: 20	WEL 15 min limit mg/m3: 82
	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.
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

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9.1. Information on basic physical and chemical properties

Appearance	Paste
Colour	Tan.
Odour	Characteristic
Flash point	41
Solubility	Immiscible 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.

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
4-Hydroxy-4-methylpentan-2-one	Oral Rat LD50: 4000 mg/kg Dermal Rabbit LD50: 13500 mg/kg	Oral Mouse LD50: 3000 mg/kg
Cyclohexanone	Oral Rat LD50: 1800 mg/kg Dermal Rabbit LD50: 1 mL/kg	Oral Mouse LD50: 1400 mg/kg
Light aromatic naptha solvent	Oral Rat LD50: 8400 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

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Hazard pictograms



14.1. UN number

UN1210

14.2. UN proper shipping name

PRINTING INK

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-D
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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>
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Further information

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

SECTION 16: Other information

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Other information

Revision	This document differs from the previous version in the following areas:. 1 - Description. 1 - Intended use. 1 - Product Use. 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.
Text of risk phrases in Section 3	R10 - Flammable R20 - Harmful by inhalation. R36 - Irritating to eyes. R37 - Irritating to respiratory system. R38 - Irritating to skin. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 - Harmful: may cause lung damage if swallowed. R66 - Repeated exposure may cause skin dryness or cracking. R67 - Vapours may cause drowsiness and dizziness.
Text of Hazard Statements in Section 3	EUH066 - Repeated exposure may cause skin dryness or cracking. Flam. Liq. 3: H226 - Flammable liquid and vapour. Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways. STOT SE 3: H335 - May cause respiratory irritation. STOT SE 3: H336 - May cause drowsiness or dizziness. Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects. Acute Tox. 4: H332 - Harmful if inhaled. Eye Irrit. 2: H319 - Causes serious eye irritation. Skin Irrit. 2: H315 - Causes skin irritation.

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.
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