

SAFETY DATA SHEET

September 2009

1. **IDENTIFICATION OF SUBSTANCE**

COLOTEMP COLOUR CHANGE CRAYONS

Description: Colour Changing Crayon
Manufacturer / Supplier: Thermographic Measurements Ltd
Riverside Buildings, Dock Road, Connah's Quay
Flintshire, CH5 4DS
info@hallcres.uk.com
www.t-m-c.com
Telephone: +44 (0) 1244 818348
Fax: +44 (0) 1244 818502
Intended Use: Temperature measurement and thermal mapping.

2. **HAZARDS IDENTIFICATION**

RANGE 1,2 & 4

Some cobalt compounds have been shown to produce dermatitis and sensitisation. Ingestion may be harmful.

RANGE (C3AY), RANGE 8

May cause harm to the unborn child. Possible risk of impaired fertility. Lead based pigments are cumulative poison. Possible risk of irreversible effects. Harmful if swallowed. Should not be used on surfaces liable to be chewed by children.

3. **COMPOSITION / INFORMATION & INGREDIENTS**

Each product listed has a fixed value within the ranges below. The exact formulation is confidential. Constituents classified as hazardous to health or with an exposure limit: (see section 11).

RANGE 1, 2 & 4

Cobalt based pigments R20/22, 36/37/38	<25%
Paraffin wax	<70%

RANGE 3, 5, 6, 7, 9, 10 & 11

Paraffin wax	<70%
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RANGE 8

C.I. Pigment Green 15 R61, R63, R40	<10%
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RANGE (YC3A)

C.I. Pigment Yellow 34 R61, R33, R40, R50/53	<15%
Paraffin wax	<70%

Together with mixed pigments not classified as dangerous for supply.

4. FIRST AID MEASURES**INHALATION (of FUMES ON HEATING only):**

Symptoms: Possible irritation of respiratory systems and coughing.
Action: Remove patient to fresh air away from fumes, avoid inhalation of fumes.

INGESTION:

Symptoms: Possible irritation of digestive system.
Action: SEEK MEDICAL ATTENTION IMMEDIATELY. If delayed and patient conscious, give milk or milk and activated charcoal. Range 8 and (C3AY) - cumulative poison, effects typical of lead pigments.

SKIN CONTACT:

Symptoms: Prolonged contact may possibly cause irritation, dermatitis or sensitisation.
Action: Wash off with soap and water. Remove contaminated clothes. Seek medical attention if irritation persists.

EYE CONTACT:

Symptoms: May cause possible irritation and redness.
Action: Wash eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Alcohol resistant foam, dry chemical, CO₂ or water fog.

COMBUSTION HAZARDS: Smoke and toxic fumes containing oxides of carbon and other products of combustion may be generated.

PROTECTIVE EQUIPMENT: Wear self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Collect crayons.

7. HANDLING & STORAGE

HANDLING: Do not inhale fumes generated when used on hot surfaces. Avoid repeated skin contact. Use in a well ventilated area or preferably under local exhaust ventilation. Do not smoke, eat or drink while using crayons.

STORAGE: Store in a cool well ventilated area out of direct sunlight.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

VENTILATION: Fumes generated in use should be controlled using local exhaust ventilation.

RESPIRATORY PROTECTION: Where this cannot be practically achieved a suitable chemical cartridge respirator or air fed visor must be used.

EYES / FACE: N/A.

SKIN / BODY:

Gloves may be worn. Contaminated personal protective equipment and clothing must be cleaned before re-use.

9. **PHYSICAL & CHEMICAL PROPERTIES****APPEARANCE:**

Wax crayons with colour according to range.

ODOUR:

Faint wax odour.

pH:

N/A

MELTING POINT/ RANGE:

N/A

BOILING POINT/ RANGE:

N/A

FLAMMABILITY:

Will support combustion

AUTO FLAMMABILITY:

N/A

FLASH POINT:

N/A

OXIDISING PROPERTIES:

N/A

EXPLOSIVE PROPERTIES:

N/A

RELATIVE DENSITY:

N/A

SOLUBILITY:

Insoluble in water.

10. **STABILITY & REACTIVITY****All Ranges**

Crayons are stable. Wax may react with oxidising agents.

11. **TOXICOLOGICAL INFORMATION****RANGE 1,2&4****The following constituents have exposure limits:**

Cobalt pigment		0.01 mg/m ³
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Range 8 and Range (C3AY)

Lead Chromate	LD50	ORAL RAT	0.15 mg/cu.m as Pb	5000 mg/kg
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The following constituents have declared LD values:**RANGE 1,2&4**

Cobalt pigment - from tests on similar compounds likely to be greater than		
	LD50	ORAL
		2000mg/kg

12. **ECOLOGICAL INFORMATION****Range (YC3A)**

N. Dangerous for the environment. Toxic to the aquatic environment may cause long term adverse environmental effects.

13. **DISPOSAL CONSIDERATIONS**

Range 1, 2, 4,8 & (C3AY) Dispose in accordance with Local Regulations (notifiable in accordance with Control of Pollution (Special Waste) Regulations SI1709 in UK). All others may be disposed of as ordinary refuse in accordance with local regulations.

14. **TRANSPORT INFORMATION**

Not classified as harmful for transport.

15. **REGULATORY INFORMATION**

Labelling according to EU guidelines:

These products have been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code Letter and Hazard designation of Product:

RANGE (C3AY) & RANGE (8)



T – Toxic



N – Dangerous for the environment

Risk Phrases RANGE (C3AY) & RANGE (8)

R20 / 22	Harmful by inhalation and if swallowed
R33	Danger of cumulative effects
R40	Possible risk of irreversible effects
R61	May cause harm to the unborn child
R62	Possible risk of impaired fertility

Safety Phrases – All Ranges

S36/37	Wear suitable protective clothing and gloves.
S51	Use only in a well ventilated area.

Safety Phrases RANGE (C3AY) & RANGE (8)

S45	In case of accident or feeling unwell seek medical attention
S60	This material must be disposed of as hazardous waste.
S61	Avoid release to the environment.

Subject to in UK : Chemicals (Hazard Information Packaging for Supply).

16. **OTHER INFORMATION**

RANGE (C3AY) & RANGE (8)

Risk Phrases

R20 / 22	Harmful by inhalation and if swallowed
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Safety Phrases – All Ranges

S36/37	Wear suitable protective clothing and gloves.
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RANGE (C3AY)

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S61	Avoid release to the environment.

These products are manufactured and supplied solely for use as temperature indicating crayons and must be applied in accordance with technical instructions.

The data and advice given apply when the product is sold for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. You should not use the product other than for the stated application or applications without seeking advice from us.

If you have purchased the produce for supply to a third party for use at work, it is your duty to take all necessary steps to secure that any person handling or using the product is provided with the information in this sheet.

If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken.

Reason for issue:-

- (a) Revision of data sheet format to meet requirements of EU Directives and UK Chemicals (Hazards, Information and Packaging) Regulations.
- (b) Revised February 2004 to add labelling information.
- (c) Revision of sections 2 and 3 to comply with REACH layout

The information on this Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication. The company do not accept any liability for any loss, damage or injury resulting from its use (except as required by law).