

MATERIAL SAFETY DATA SHEET

1. **IDENTIFICATION OF SUBSTANCE**

THERMOBATCH - (VARIOUS COLOURS AND TEMPERATURES)

Use: for pigmentation of plastic masterbatch.

	UK	USA
Manufacturer / Supplier:	Thermographic Measurements Ltd Riverside Buildings, Dock Road, Connah's Quay, Flintshire, CH5 4DS	Thermographic Measurements 1820 Pickwick Lane Glenview, IL 60025
Telephone:	+44 (0) 1244 818348	+1 847 998 6460
Fax:	+44 (0) 1244 818502	+1 847 998 6866

2. **COMPOSITION / INFORMATION & INGREDIENTS**

Chemical description:

Non hazardous : microencapsulated thermochromic pigment (various colours) , non thermochromic pigments (various colours), Amino plastic resin, other polymers and paraffin waxes.

Hazardous components: None as supplied.

On heating formaldehyde may be generated -CAS-No.: 50-00-0 // EINECS-No.: 200-001-8 // EG-No.: 605-001-00-5. R23/24/25-34-40-43

3. **HAZARDS IDENTIFICATION**

Hazard description :

Not toxic as supplied but processing at temperatures above 120C can generate irritant fumes of formaldehyde.

Wearing of dust mask, gloves and eye protection for handling cold powders is recommended if appropriate for conditions of use. Care must be taken when handling to avoid dust explosion.

4. **FIRST AID MEASURES**

INHALATION:

Not a problem with material as supplied but when being heated fumes may be evolved including Formaldehyde. Remove the affected person from the exposure and consult a Physician.

SKIN CONTACT:

Avoid skin contact. Wash immediately with soap and water, remove any contaminated clothing.

Molten product – cool affected area immediately by plunging in cold water for 10 minutes.

DO NOT remove

adhering material. Obtain medical attention. If whole limb is surrounded split product away to avoid tourniquet effect.

EYE CONTACT:

Rinse with water for 10 minutes immediately. Consult physician if irritation persists.

INGESTION:

Consult physician immediately.

5. **FIRE FIGHTING MEASURES**

QUALIFIED EXTINGUISHING MEDIA: Foam, dry chemical powder or CO₂

NOT QUALIFIED EXTINGUISHING MEDIA: Water jet.

FIRE / EXPLOSION: Possible formation of toxic gas when heated to d composition or in case of fire.

FURTHER INFORMATION: Wear self contained breathing apparatus, fire and chemical resistant clothing.

6. **ACCIDENTAL RELEASE MEASURES**

Sweep up or cover spills with vermiculite, pick up and keep in closed container for disposal. Wash area with soap and water

7. **HANDLING & STORAGE**

STORAGE:

Keep container tightly closed. Store in a cool conditions out of direct sunlight. Do not freeze. No significant hazard in storage.

HANDLING:

Do not inhale dust and avoid skin contact. Use in a well ventilated area or preferably under local exhaust ventilation. When handling large quantities always wear protective equipment. During moulding process's eyes may be irritated by formaldehyde fumes given off - exhaust fumes or use ppe suitable for organic vapours. Take care when handling powders to avoid risk of dust explosion. Electrical fittings should be dust proof.

Where exhaust systems are used they should be equipped with explosion relief panels and runs of ducting should be as short as possible. Earth all metal containers to avoid possibility of static discharge.

8. **EXPOSURE CONTROL / PERSONAL PROTECTION**

WORK HYGIENE: When handling product, do not eat, drink or smoke. Clean hands with water and soap. Take off all contaminated clothing.

RESPIRATORY PROTECTION: An approved respirator may be used.

PROTECTION OF HANDS: Suitable impervious gloves may be worn.

EYES: Chemical safety goggles may be worn.

OTHERS: Suitable work clothing,, may be worn.

9. **PHYSICAL & CHEMICAL PROPERTIES**

APPEARANCE:

Form: Powder
Colour: Depends on type.

ODOUR:

Mild.

pH:

N/A

BOILING POINT / RANGE:

N/A

MELTING POINT / SOFTENING

Approx 140C

FLASH POINT:

>300C

EXPLOSION LIMIT:

N/A

VAPOUR PRESSURE:

N/A

BULK DENSITY:

300-500 kg/m³

SPECIFIC GRAVITY:

0.96 - 1.0

SOLUBILITY IN WATER:

Dispersible in water or oil

VISCOSITY:

N/A

IGNITION TEMPERATURE:

N/A

10. **STABILITY & REACTIVITY**

THERMAL DECOMPOSITION:-

Used according to specification should not occur
May occur with fire or excess heat. Keep away from
ignition sources. CO_x Formaldehyde vapour may be
generated.

HAZARDOUS REACTIONS:-

Keep away from strong acids, alkalis and oxidising
agents.

11. **TOXICOLOGICAL INFORMATION**

Occupational exposure limits for paraffin wax fumes:

8 hours TWA: 2 mg/m³

10 minutes TWA 6 mg/m³

12. **ECOLOGICAL INFORMATION**

Take measures to minimise the effect on the ground water.

13. **DISPOSAL CONSIDERATIONS**

Dispose material in accordance with local regulations.

14. **TRANSPORT INFORMATION**

ADR/RID:

IMDG-Code:

ICAO/IATA-DGR:

UN-Nr:

MFAG:

EmS:

FURTHER INFORMATION:- No dangerous goods according to transport regulations.

15. **REGULATORY INFORMATION**

EEC Classification according to EEC rules:-

Supply Classification:- Not classified as Harmful as supplied.

Hazard Symbol:-

Risk Phrases:-

Safety Phrases:-

Threshold limit value (TLV)

16. **OTHER INFORMATION**

When used in the manufacture of masterbatch or other pigmented plastics localised extrac-
tion should be used to remove any formaldehyde vapours generated by the heat of moulding.
The data and advice given apply when the product is sold for the stated application or appli-
cations. 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.

EC - MATERIAL SAFETY DATA SHEET

According to 91/155/EEC

August 2006

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) August 2006 : Revision and addition of chemical and physical data.

Prepared by: <u>CHRISTOPHER CHAPMAN - LABORATORY MANAGER</u>
--

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).