

THERMOCHROMIC PAINT MATERIAL SAFETY DATA SHEET (MSDS)

Manufacturers Name: Bastion Paint cc
Street Address: Crest Road, Salt Rock
4391, South Africa
Emergency Telephone No: +27 (0)32 525 4491

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE / PREPARATION

Trade Name : Thermochromic Paint
Product Class : Water based acrylic paint with colour change that is triggered by temperature change.
Product use description : Various Colours
Arts & Crafts / Decorative / Architectural paint for application onto a variety of substrates. For interior applications.

SECTION 2 – COMPOSITION INFORMATION ON INGREDIENTS

These products are a preparation of numerous blended chemicals. In the concentrations present no individual chemicals are regarded as hazardous.

SECTION 3 – HAZARDS IDENTIFIED

These products are not hazardous but they will impart a visible colour to water.

SECTION 4 – FIRST AID MEASURES

Inhalation: Move to fresh air
Eye contact: Wash with plenty of water for 15 minutes. If irritation persists consult a physician.
Ingestion: Small amounts - drink 1-2 glasses of water.
Larger amounts - consult a physician
Never give anything by mouth to an unconscious person

SECTION 5 – FIRE FIGHTING MEASURES

These products are non-flammable. There is zero explosion risk.

In the event of a fire, very high temperatures may evaporate all the water and other liquids from spilt product. Even the dry ingredients are not readily flammable but thermal decomposition of some dry ingredients may occur.

Suitable extinguishing media: Use extinguishing media appropriate to surrounding fire.

Specific hazards during fire: Melted containers may lead to spilled product and slippery conditions. If a large number of containers are present in a confined space then fire fighters should wear self-contained breathing apparatus and protective suits.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid slipping.

Avoid contact with clothing that should not be stained.

Environmental precautions

CAUTION: Keep spills and run off out of municipal sewers and open bodies of water as the paint will impart a color to water.

Method for cleaning up

Contain spills immediately with inert materials (sand, earth). Due to the high product viscosity, spills will not be fast flowing. Recover uncontaminated paint for re-use.

Transfer contaminated liquids and solid diking material to separate containers for use, recovery or controlled disposal. Normally this paint can be easily dried and disposed of as solid waste.

SECTION 7 – HANDLING AND STORAGE

Handling:

Avoid eye contact and excess skin contact

Clothing may be permanently stained

Use in ventilated areas (as per normal paint)

Keep out of reach of children

Storage:

Temperature: 1-30°C. Do not freeze.

Store upright in sealed containers.

Can be stored for 2 years below 25°C (stir before use).

Higher storage temperatures may reduce stable storage time.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection: Safety glasses are recommended when painting (especially spray painting). Have running water available nearby.

Area of use should have adequate ventilation. A slight headache or nausea after prolonged exposure may indicate inadequate ventilation. Move to fresh air and improve ventilation before continuing (as per normal paint).

Hand protection: Not required but avoid excess contact with skin.

Respiratory protection: Not required unless no ventilation is possible when actually painting and during first hours of drying. This is more applicable to painting large surface areas such as the inside walls of buildings.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Viscous liquid

Colour: Various vividly bright colours depending on exact product.

Odour: Typical water based paint smell. Coalescing agent (NX795) dominates the odour when drying.

pH: 8.0-8.9

Boiling point: >100 degC

Melting point: -3 degC

Flash point: Non-combustible

Lower explosion limit: Not applicable

Higher explosion limit: Not applicable

Relative vapour density: <1.0 water

Water solubility: Not soluble: Can be diluted with water. Contains emulsion and suspended solids

Relative density: 1.10 – 1.30

Evaporation rate: <1.0 water

Percent volatility: Aprox. 55% (mainly water but also 2-3% non-flammable solvents)

Note: the physical data presented are typical values and should not be constructed as a specification.

SECTION 10 – STABILITY AND REACTIVITY

Hazardous reactions: None known. Stable

Materials to avoid: None know.

SECTION 11 – TOXICOLOGICAL INFORMATION

No data is available for this material.

LD50 values will be in the range of normal decorative/architectural acrylic (water based) paints.

SECTION 12 – ECOLOGICAL INFORMATION

No data is available for this material.
LC50 values will be in the range of normal decorative/architectural acrylic (water based) paints.

SECTION 13 – DISPOSAL CONSIDERATIONS

Environmental precautions

Keep spills and run off out of municipal sewers and open bodies of water.

Disposal

Allow product to dry in flat open containers and dispose of dry material as solid waste according to local legislation.

Dispose of containers in accordance with local legislation.

SECTION 14 – TRANSPORT INFORMATION

Not regulated. Not dangerous for transport. As far as known this is the case in all countries.

If transporting large quantities (greater than 100 litres) then please consult relevant regulations of the applicable country.

Bulk transport spills may lead to slippery road conditions.

In the event of long distance transport secure buckets and containers in an upright position using straps or other applicable means. Containers that are allowed to fall over, roll around or be subject to shock-force may leak. In the event of long distance transport in an uncontrolled environment, such as via courier in a parcel, then tape pull-off lids up firmly to prevent accidental spills if parcel is bumped or dropped very hard. Package parcels in such a way that accidental leaks will not penetrate the outside of the parcel. This is the responsibility of the party initiating the transport.

SECTION 15 – REGULATORY INFORMATION

No hazard label as product is not hazardous.

SECTION 16 – OTHER INFORMATION

These products are non-radioactive.

This information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under our direct supervision, no representation is made that the information is accurate and buyer may rely thereon only at buyer risk. We make no guarantee that the health and safety precautions we have suggested will be adequate for all individuals and/or situations involving its handling and use.

Name : Brian Quicke

Revision Date : 03 May 2022

Title : Member (BSc Chemistry, honours)

Signature: _____