



LIQUID MORTA DYES

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RED	BLACK	BROWN	STONE
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DESCRIPTION:

PALACE MORTA DYES are liquid dispersions of iron oxide pigments giving the applicator a convenient means of ensuring the colour is instantly and completely dispersed throughout the mortar mix after initial addition to the gauging liquid. The UV stable iron oxide based pigments ensure colour stability is retained for just as long as when using conventional powder based colours.

The convenience and control afforded to adding colour as a free-flowing liquid enable the user to produce more consistently shaded mixes on a regular consecutive basis by monitoring the precise volume of MORTA DYE each time a mix is produced. PALACE MORTA DYES find applications in pointing around roof tiles, ridges, copings or brickwork. The colours can also be used in concrete mixtures for paths, patios and driveways and have found favour in pre-cast applications when producing ornamental sculptures, building blocks, pillars and decorative stonework. All oxides used in PALACE LIQUID MORTA DYES conform to BS 1014.

APPLICATION:

To ensure the precise shade of colour required is attained always carry out a test mix using the same mix proportions and sources of sand - cement - aggregate as will be used in the full application. Using a small (<5kg) test mix add the MORTA DYE to the gauging liquid at a test ratio of 1 part dye to 2 parts water then add to the remaining components, along with any admixtures which may be required in the mix. Further adjustments can be made to the water content, or the powder level until the wet shade required is attained. It is advisable to allow the test mix to set overnight so that the final colour effect can be fully appreciated and compared to the shade required. As a general guide the following proportions added to the gauging liquid in a pointing mix of 1 part cement to 5 parts coarse builders sand have been shown to influence colour shade proportionately:

MIX EXAMPLES:

The mix designs shown below are typical examples of the dye to gauging liquid ratios used to produce varying colours shades, however the accuracy of the recommendations given will depend greatly upon the colour of the local sands and aggregates used. Sands drawn from supplies in the south of England are much yellower than northern red sands and the effect on final colour is very significant, hence the need to carry out a local "test mix" to ensure the desired shade is attained before proceeding to full site installation:

MIX TYPE:	5 : 1 SAND CEMENT MORTAR			3 : 1 : 1 AGGREGATE SAND CEMENT CONCRETE		
	STRONG	MID	PALE	STRONG	MID	PALE
BLACK	1 to 3	1 to 6	1 to 10	1 to 1	1 to 3	1 to 5
RED	1 to 3	1 to 5	1 to 8	1 to 1	1 to 3	1 to 5
YELLOW	1 to 2	1 to 3	1 to 6	1 to 1	1 to 2	1 to 4
BROWN	1 to 3	1 to 5	1 to 8	1 to 1	1 to 3	1 to 5

When using as a pointing mix, wet the joints so that the bricks do not absorb too much moisture from the mortar. Use the edge of the trowel to press the mortar in, and leave it projecting a little from the bricks. Finally as the applied mortar cures there may be a tendency for temporary blanching or whiteness to appear on the exposed mortar face, which will be particularly apparent for darker shades. This may be due to either salts or lime in the mix leaching out as part of the curing process and the effect will diminish with time to leave the desired permanent colour.

STORAGE & PACKAGING:

MORTA DYES are supplied in 1kg; 2.5kg & 5kg polythene containers and must be stored in sealed secure conditions away from sources of heat, or exposure to low temperatures and frost.

Should further more specific technical information be required, contact the Palace Technical helpline on 0151 486 6101.

The information provided by this Technical data sheet is given in good faith and is to the best of our current knowledge true and accurate. However it is given without guarantee, as conditions of use and workmanship involved are both beyond our control. All information supplied is subject to the company's terms and conditions of sale, copies of which are available on request.

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SUBSTANCE IDENTIFICATION:			
MORTA DYES IRON OXIDE BASED DISPERSIONS			
COMPOSITION; An aqueous dispersion of synthetic iron oxides; dispersing aids and viscosity modifiers		HAZARDS CLASSIFICATION: Non Hazardous	
FIRST AID MEASURES:			
INHALATION: If inhaled, clear out mouth with clean water and seek medical attention. If irritation or breathing difficulties persist, seek medical attention.	SKIN CONTACT: Wash off skin with warm soapy water. The dilution will not cause irritation, but prolonged and unattended contact with the mixed mortar should be avoided	INGESTION: Clean out mouth with copious volumes of water. Do not induce vomiting. Seek prompt medical attention and show this data sheet.	EYE CONTACT: Irrigate thoroughly for 15 minutes with clean running water or a boric saline eye wash bottle. Seek medical attention should eye irritation persist or become inflamed.
FIRE FIGHTING MEASURES: This product is a NON-FLAMMABLE water based concentrate.			
ACCIDENTAL RELEASE MEASURES: Absorb spillages on sand, sawdust or absorbent granules and confine residues in a clearly marked sealed container for disposal in accordance with Local Authority regulations for low-hazard water based Building chemicals.			
HANDLING & STORAGE: Store in sealed, clearly marked containers either as a concentrate or in its diluted form. Keep out of reach of children in a cool well-ventilated environment – Protect from frost, heat and direct sunlight.			
EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENT:			
Respiratory: Good ventilation is required in confined spaces.	Hand: Wear 17" long elbow length heavy duty natural rubber gloves or gauntlets approved to EN 374 & EN 420 with a BTT rating of > 4 hrs with alkaline pastes.	Eye: BS 2092 Goggles should be worn for all applications to help prevent accidental face/eye contact	Skin: A disposable PVC apron should be worn on top of overalls, however if the fabric becomes contaminated these should be laundered immediately.

SAFETY DATA SHEET No. 09

PRODUCT: LIQUID MORTA DYES

PHYSICO-CHEMICAL PROPERTIES:		
Appearance – Dark free-flowing liquids. Miscibility – Water only Ph – 8.0 – 10.0 Density – 1.30 +/- 0.05 Odour – negligible. Viscosity – 2000 - 2500cps	Boiling point - 101°C Explosion limits - n/a Flash Point - n/a Vapour pressure - N/D Melting point - n/a Colour - Dark opaque	
STABILITY & REACTIVITY: Storage in frost affected conditions or at elevated temperatures will affect the performance stability of the product, however there are no known adverse/unsafe reactions should this product be inadvertently contaminated.		
TOXICOLOGICAL INFORMATION: LC50 – Readily disperses and biodegrades in water, but will cause localised high alkalinity and discolouration Acute toxicity – Irritating to eyes and skin.		
Acute toxicity: n/a Corrosivity - N/A	Sensitisation: n/a Mutagenicity: n/a	Carcinogenicity: n/a Reproductive toxicity: n/a
ECOLOGICAL INFORMATION: Ecotoxicity – Acute fish toxicity – not known. Biodegradable in both fresh and salt water.		
DISPOSAL CONSIDERATIONS: Dispose according to Local Authority regulations for aqueous, low hazard emulsion based building chemicals.		
TRANSPORT INFORMATION: Not subject to CPL / ADR restrictions When transporting overseas, classify as IMO Class 3.3 – Marine pollutant.		
REGULATORY INFORMATION: CHIP Classification – Not applicable - Irritating to eyes and skin when in mixed mortar. Wear suitable protective clothing. Do not dispose into ponds or watercourses. The use of this product at work will be subject to an assessment in accordance with the 1994 COSHH regulations.		
FURTHER INFORMATION: The information supplied in this safety data sheet is intended to assist in the use of the above product without risk to safety and health and is based on current knowledge and experience of the associated physico-chemical hazards. The data does not signify any warranty with regard to the product's properties. This information may be used to assist in formulating a COSHH risk assessment if applied at work.		