



Resene Paints Limited

Architects Memo

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THE PROBLEM OF LIFE ON PAINT FILMS

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Paint films not only have to resist energy attack, (infra-red and ultra-violet radiation) and chemical attack from a host of industrial and household chemicals, but also attack by a ubiquitous life form, the moulds and fungi. On painted surfaces mould looks like dirt and frequently the two cannot be visually distinguished. The most common species are black but others can be brown or green. By wetting the surface and rubbing, mould will show up as slime.

The theorist may be interested in knowing that moulds seldom live alone on paint films but in a symbiotic relationship with enzyme producing bacteria. Also that the substrate need not be the primary source of nutrient — airborne dirt provides a perfectly satisfactory diet.

The practical man, however, should be aware that mould is a major cause of paint disfigurement. It destroys the paint's fresh clean appearance and if left unchecked shortens the life of the paint film. Unless removed within a few months of its appearance, mould penetrates the body of the existing film and once firmly established, will grow through subsequent paint coatings, impairing adhesion and ruining the appearance of the paint work.

The practical man must also be aware that mould will only grow in damp areas or where the relative humidity is greater than 70%. Most high quality paints contain a fungicide but its killing ability is finite and the mould will eventually take over. The only way to **permanently** fix a mould problem is to remove the source of moisture and/or provide adequate ventilation.

Fungicide washes do however have a place in the scheme of things. They can be used as a cosmetic treatment to clean up mould infested surfaces where provision of adequate ventilation is not feasible. But far more importantly they **must** be used to sterilize old surfaces before repainting.

It is particularly important to include such a treatment in the specification where the surface to be coated is not smooth. Surface roughness, which allows dirt to accumulate, will invariably harbour mould. Weathered, unpainted concrete is just such a surface. (See Architectural Memo No. 7)

For years Resene Paints marketed sodium salicylanilide as their Moss & Mould Killer. This reliable material was one of the few non-toxic fungicides available, and was available as a water-soluble powder. Difficulties in manufacturing this material have caused one supply company after another to pull out of this area until finally it is no longer available.

As a replacement for this material Resene Paints Ltd have chosen to market sodium hypochlorite solution under the trade name "Resene Moss & Mould Killer (Liquid Concentrate)." This material does everything that the sodium salicylanilide does without the tendency to stain paint work. The concentrated solution is diluted for use with about nine parts of water to one of concentrate. The water addition can be increased or reduced depending on the severity of the mould infestation.

A new technical data sheet has been prepared and this, along with the product, is available from Resene Paints Ltd., and at all Resene Color shops.

GOUGH STREET, LOWER HUTT,
NEW ZEALAND. P.O. BOX 36-006.
TELEPHONE (04) 684-319.
TELEGRAMS "RESENE",
TELEX: WELLINGTON NZ 3353
SEEK (RPL).
FAX: (04) 686-987.
BRANCHES: WHANGAREI,
AUCKLAND, HAMILTON,
TAURANGA, ROTORUA, NAPIER,
HASTINGS, NEW PLYMOUTH,
PALMERSTON NORTH, LEVIN,
PARAPARAUMU, NELSON,
CHRISTCHURCH, TIMARU,
DUNEDIN, QUEENSTOWN,
INVERCARGILL, FIJI.