

## Algoclear Softclean: a simple method developed for the treatment of roofs, walls and general amenity

### Pitched roof problems- Sustainable and non-invasive algae, lichens & moss eradication

Algae, lichens and moss thrive in areas untouched by sun, so can develop rapidly on tree-shaded and north-facing roofs. Spreading moss can quickly upholster roof surfaces, filling in voids between roof tiles, reaching under and lifting up, roofing materials. Heaving roof tiles can allow rainwater and other moisture to seep into a roof's structure causing decay and rot. Vegetation falling into gutters can stop water draining correctly from the roof. Long term these growths on a roof can result in costly repairs and also reduce the lifespan of your roof.

### The AlgoClear Pro SoftClean method

A simple method developed for the treatment of roofs, walls and general amenity. It is non-aggressive in nature. The system comprises the chemical and equipment to deliver effectively and safely onto the roof. The process is particularly suited to porous materials such as mineral tiles, slates, thatch and shingle.

### The active ingredient

**Algoclear Pro** is Didecyl dimethyl ammonium chloride (DDAC). It works by contact with microbial life, killing micro-organisms, by disrupting the cell walls, killing the organism. In nature biofilms almost always consist of a mixture of many species of bacteria, fungi, algae, yeasts, protozoa, and other microorganisms. **Algoclear Pro** is wide spectrum and kills 99.9% of them.

**Algoclear Pro** is a cationic surfactant. It foams and cleans like a soap. The solution works on the living and dissolves lipids. That is all. It does not interact with organic residues such as metabolites or the substrate materials.

**Algoclear Pro's** "high purity" designation is your guarantee that the treatment does not oxidise or interact with any materials, fixings, sealants or coatings used in the manufacture of a roof. It is free of any solvent or bleaching agent so will not discolour the roof. Or degrade leadwork, aluminium and tile fixings.



These growths on a roof can result in costly repairs



Before and after





## Surface preparation

Roof preparation is an integral part of the treatment method. Mechanical removal of excessive, bulky vegetative material should be undertaken using scraping tools. Avoid power jetting this has the potential to degrade the surface. Some roof areas will not require preparation.

## Surface protection

**Flower beds:** Protect from spray drift using geotextile fleece.

**Sand stone:** Do not allow concentrate to dwell or dry on materials.

**Gutters:** Cover the gutters with plastic flashing and fit wire balloons to outlets

**Grass etc:** Spread a tarpaulin to ease removal of debris. The active ingredient can damage plants. On contact discolouration may take place. Chlorophyll will be replenished after a few days of growth on grass but flower petals do not recover. Any damage is limited to point of contact and proportional to the intensity of the spill. In good weather, the occasional spray drift is not a problem.

**Ponds:** Avoid direct spray into freshwater garden & ornamental ponds

## It is safe to use

Following manufacturers recommended dilution means the product only requires precautions common to domestic products i.e.

- Animals are kept off site during wet work until the ground has dried
- Adjacent foliage needs protecting or as the case may be rinsing.
- **AlgoClear Pro** has received EU Biocides Directive approval for "PT2" applications - surface biocide - bearing a mention of applicability to children play areas.
- It degrades in contact with live biomass. This is the mechanism of environmental acceptability - The product cannot migrate in the ground or drain without being quickly de-activated

## Applying the treatment

The product can be applied by any practical means. Sprinkler head, spray, watering can, brush etc.

### Mix and pump

The mix is pre-prepared in a large can or bin then pumped using an ordinary garden pump/garden shower head or knapsack sprayer

### Auto injection flow

Using an injection box, set to the appropriate injection rate, will do the mixing automatically as triggered by demand. The operator does not need to handle the concentrate. Regular water tap mains pressure is usually sufficient the spray a roof.

### Telescopic Poles

They are required to apply the product with precision, nozzles are calibrated to reduce the risk of spray drift over neighbouring homes. ►►►

## Roof cleaning guide to good practice



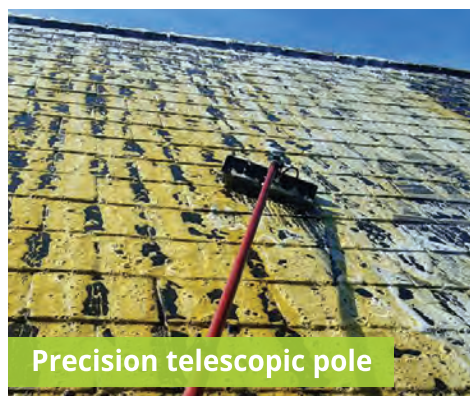
Preparation



Spread a tarpaulin to ease removal of debris



Injection box



Precision telescopic pole



## Concentrations

For roofs 1 to 18 (injection box at 5.5%)

## Application rates

On porous substrates apply to saturation of approximately 1 litre per m<sup>2</sup> on concrete tiles. On non-absorbent materials (natural slates, clay tiles) the coverage will increase to approximately ½ litre of mix per m<sup>2</sup>.

On non-porous roofing material, spray from eaves to ridge to limit the loss of product by rivulet dribbling.

## Temperature

There is no temperature threshold as such. Below 8°C the efficacy is hampered and the work becomes unpleasant. Hot water can help to overcome a cold day, but adds little to the treatment efficacy.

## The cleanse process

The product begins to work immediately and the initial phase (killing the biofilm) is substantially completed within ½ hour, natural weather cycles will do the rest. The speed of cleansing is by and large in relation to site exposure and to the type of contaminant. Different contaminants will shed at different rates - Moss remnants will quickly decay and disperse. White and yellow lichen will also die within a short period and begin to detach. Lichen needs dry and wet weather cycles to break the bond with the tiles and will fall gradually over a few months.

Black metabolites, particularly common on concrete tiles, are water soluble and begin receding after the first rain. Dark discolouration can take a few months to disappear completely and reveal the true appearance of the roof.

## Likely re-occurrence time

On roofs some light green staining can reappear after about four years post treatment, if the building is situated in a moist environment. Moss is slow growing and will take a long time to come back. On average, roof cleaning should be undertaken every five years (Dictated by environmental conditions).

## Site safety

The **SoftClean** technique is inherently safe for a building. The biocide in use has no detrimental effect on any material, including metal on any hard external surfaces. Your operators spraying technique is well controlled and all applicators are trained to work with minimal disruption to the occupier.





## If you like the completed result...

We're certain you will be delighted with the finished result, don't forget to tell your friends and don't forget that **AlgoClear Pro is safe on all external hard surfaces**. If you have algae and other bacterial staining on:

**Walls (rendered, brick, stone or cladding)**

**Driveways**

**Timber decking sheds or fencing**

**Polytunnels & glasshouses**

**Polycarbonate shelters**

**Stables**

**Tennis courts**

**Childrens play equipment**



Driveways or Patios



Polytunnels and glasshouses



Walls



Brick, stone or cladding



Timber, decking, sheds, fencing



Tennis courts