



MICON THATCHSAYF

MICON THATCHSAYF is an environmentally safe and effective fire retardant coating for the fire protection of thatch roofs. On exposure to heat, the fire retardant forms a protective char that restricts oxygen flow to the surface and reduces the surface temperature of the coated base.

Micon Thatchsayf

- tested in accordance with CSIR, DIN and UL (modified) requirements
- environmentally acceptable
- improves thatch compaction
- allows the thatch to breathe to prevent rotting
- retards bacterial and fungal growth
- does not alter the natural appearance of thatch

Wording of typical Specification

"Apply **Thatchsayf** by high pressure spray to both sides of the roof in accordance with manufacturer's instructions – Micon P O Box 76204, Wendywood, 2144, South Africa.

Description

MICON THATCHSAYF is a water-based solution of fire-retardant and intumescent chemicals in a polymer emulsion binder formulated for the protection of thatch roofing. This combination provides dual protection with the fire retardant chemicals penetrating the leaves of the thatch and the intumescent, as well as some of the fire retardant chemicals, forming a thin protective film on the surface of the thatch stems.

Aesthetics, Fungal growth, Leaching and Environmental aspects.

MICON THATCHSAYF does not change the natural appearance of the thatch and improves compaction without hindering its ability to breathe. Thatchsayf also retards bacterial and fungal growth. In order to minimise water penetration it is crucial that roof slopes are 45 degrees.

The main constituents of Thatchsayf consist of fertiliser type chemicals, i.e. phosphates and nitrogen compounds, and as such are environmentally friendly, however, high concentrations, such as may be reached in the run-off water after the first rain, may cause damage to vegetation in the drip-off area depending on the amount of rain and thus the dilution.

MICON THATCHSAYF TECHNICAL INFORMATION

Good thatching practice

It is crucial that the thatch roof construction complies with good thatching practice, as fire performance is also dependant on the construction of the thatch. This ensures that when the roof is sprayed with **Thatchsayf** it will maintain its integrity in resisting the ravages of fire for sufficient time to allow fire-fighting services to arrive.

Quality control

Quality control procedures are of a high standard and all batch numbers of material are recorded for each contract and copies of certificates are kept by both Micon and the CSIR for each completed job.

Application

Spraying of **Thatchsayf** is undertaken by MICON approved and trained applicators. Strict control of the applicators ensures that the correct pressure and minimum quantity of 1.3 litres per square metre are applied to the thatch. Thatchsayf is easily applied by means of high pressure spraying equipment to both the outside and inside surfaces. This ensures that at least 5 mm penetration is achieved to the underside of the thatch (where compaction is much denser), and up to 75 mm penetration to the outside of the thatch. It is important that the thatch roof is not disturbed after spraying and in this event re-application of the affected area is necessary to ensure complete protection. Spot checks on completed roofs are made by the CSIR.

Certification

As the application of **Thatchsayf** is to provide vital protection in the event of a fire, MICON offers a Certificate for each contract. The homeowner, Architect, Developer or Building Control Officer can request this document, which certifies supply of product to site. The applicator also signs that the product has been correctly applied in accordance with the manufacturers instructions.

Action in Fire

On exposure to heat the first stage of protection occurs when the intumescent material foams and forms an insulating char on the surface limiting the heat flow and the supply of oxygen, which supports combustion. The second stage of protection occurs when the fire retardant chemicals react with the cellulose and charring takes place, again having the effect of limiting the flow of oxygen.

Fire Tests

Fire Properties	Test Method
• Resistance to ignition	DIN, UL (modified)
• Weathering	CSIR, UL (modified)
• Rot resistance	CSIR

Tested by the CSIR report number BF010/020 September 1993.

Physical Properties

Viscosity	:	16 seconds F.C.4
Specific gravity	:	1.16
Drying time	:	2 – 5 hours
Full cure	:	4 days
Solid content	:	47 – 49% / vol
Spread rate	:	1.3 l/m ²
Shelf life	:	12 months