



SAMI SOLUTIONS

SAMlcel – Cellulose Fibre



SAMlcel Solution No. 1

World-class Asphalt Stabilising Agent Now Produced in Australia!



A new addition to SAMI's stable of trusted road maintenance products, SAMlcel is the only cellulose fibre product of its kind produced in Australia for use in Stone Mastic Asphalt (SMA) mix.

Strong absorbent capabilities

SAMlcel is a cellulose fibre product which is used as a stabilising agent in the manufacture of Stone Mastic Asphalt (SMA), SAMI's FricSeal, and other "open type" asphalt mixes.

It is produced from long wood based cellulose fibres, which have very strong absorbent capabilities.

SAMlcel fibres absorb a significant amount of the free binder within the mix, which results in a coating binder film thickness around the aggregate surfaces.

Prevents binder "drain-down"

The inclusion of SAMlcel avoids the problems of binder drainage or "drain-down" through the material during transportation from production plant to site and during the paving operation and compaction of the mix.

SAMlcel prevents binder "drain-down" throughout the operational life of the asphalt mix - from mixing plant to pavement.

Generally 0.3% (by weight) is added during the manufacturing process. This results in the stability of the binder

coating on the aggregate and ensures the binder is held in suspension within the voids throughout the laying operation and continues to do so throughout the operational life of the mix.

Application

SAMlcel pellets are supplied in bulk recyclable bags containing 300kgs and in 3kg bags. In bulk form the pellets are ideally suited to drum (continuous mix) plants. The pellets are fed into the mix by an auger system from a hopper.

The auger feed system is calibrated to ensure the correct amount of pellets are introduced into the production of the mix.

SAMIceI - World-class asphalt stabilising agent now produced in Australia!



SAMIceI 3kg bagged pellets and 1kg compressed bricks are suited for use in batch plants and are added to the pugmill at the start of the dry mixing cycle. Mixing time is increased by 5-15 seconds for both the dry and wet cycles to ensure even distribution of the fibre. The polyethylene bags melt at relatively low temperature and have no effect on the binder or the end product.

Typical Properties

Structure	Greyish, long fibres
Apparent Density	25-35g/l
Maximum Fibre Length	5000 µm
Average Fibre Length	1000-1200 µm
Average Fibre diameter	25 - 45 µm
Bulk Density of Pellets	0.25 - 0.35

Temperature

The manufacturing temperature of the mix must be kept below 180°C otherwise damage to the fibres will result. If the temperature of the mix is too high fuming may occur.

Packaging

SAMIceI is supplied in pellet form in bulk 300kg bags or packed in 3kg plastic meltable bags. SAMIceI is also supplied 1kg compressed bricks in meltable bags. The bricks are packed on pallets containing 176kg which are shrink wrapped in plastic.

Storage

SAMIceI has an indefinite storage life and should at all times be kept dry and stored under cover.



For further information on any of the products featured in this Case Study or any of SAMI's other specialist road maintenance products and services, please contact:

SAMI Pty Limited A.C.N. 001 089 416
 12 Grand Avenue, Camellia, NSW 2142
 Telephone (02) 9638 0110. Facsimile (02) 9638 4090.

