Waterproofing Compound RWPC-03

RWPC-03 is a waterproofing compound developed by VSSC for the waterproofing of silica tiles and silica felt/ fabric based flexible insulations. It is an alkoxysilane based system, processed by controlled hydrolysis of siloxanes. This is an environment friendly method and imparts efficient waterproofing of the system. The treatment involves spraying the aqueous solution of an organo-polysiloxane waterproofing compound on the substrate (preferably glass and silica based) and heating them to form a waterproofed article. In the case of silica tiles and silica felt/fabrics, water absorption could be brought down from 350% to <5% and <10% respectively using this compound. It is not a conventional surface coating method and makes both surface as well as bulk of the material water resistant.

Typical properties / characteristics:

Color and consistency : Transparent liquid

Viscosity of water proofing

compound : <5cP

Weight increase due to

water proofing : 3% max by weight

Water absorption of

water proofed silicatile : <5 % by weight

Water absorption of water

proofed flexible insulation : <10% by weight

Applications

RWPC-03 can potentially be used as general purpose water proofing compound for silica based components including composites.

Technology Transfer from ISRO

ISRO is willing to offer the knowhow of this technology to suitable entrepreneurs / industries in India. Capable manufacturing industries interested in acquiring this knowhow may write with details of their present activities, requirements and plans for implementation, infrastructure and technical expertise available with them, their own market assessment, if any, and plans for diversification to the address given below.