RENITHERM® PMC

Intumescent fire protection coating for electrical cables

Renitherm® PMC is a water based coating which reduces the spread of flame in cable runs and prevents the emission of hydrochloric gases in cable fires. Renitherm® PMC coating foams up under the effect of heat (to form an insulating layer).

Renitherm® PMC fire protection systems insulate against heat, check fire, absorb HCL gases, protect property, reduce the risk of damage. Renitherm® PMC is officially tested by institutes at home and abroad by the relevant industry, by our technical service department and by the specialist laboratory.

Renitherm® PMC is a water based system. Therefore particularly suitable for application in areas without natural ventilation and exposed to the risk of explosion.

Unprotected cables catch light after only a few minutes in the case of fire. Power current for vital control functions, supplies and services fails very quickly. Burning cable sheaths carry the fire rapidly forwards. Burning PVC gives off aggressive vapours. Indirect damage from cable fires (breakdowns, corrosion resulting from harmful gases affecting sensitive instruments) is generally greater than the fire damage initially visible.

Cables, cable trays and holders protected with Renitherm® PMC help prevent damage or keep it within reasonable limits. The time that elapses before the current failure is increased many times. The coatings with Renitherm® PMC comply with the standards IEC 332-Part 3, Category A-F, A-FR, concerning the spreading of fire.

The release of hydrochloric acids vapors is slowed down considerably by using Renitherm® PMC. Acid vapours that are released are neutralized. There is no subsequent burning of protected cables after the direct effect of fire has been halted. Renitherm® PMC is an effective protection against the results of fires caused by short circuits.

AUDAX fully complies with the requirements of EN ISO 9001 standard. This certification is one more proof for Renitherm®'s quality, reliability and safety.

The thermal conductivity of a Renitherm® PMC coating that has not foamed is about the same as that of a plastic cable sheath, which means that the higher temperature of the conductor is raised only insignificantly in cables protected with Renitherm® PMC. The current-carrying capacity remains virtually unchanged.

Renitherm® PMC protective coatings are of low weight and, at low film thickness, have the attractive appearance of a highbuild coating. They are very simple and easy to apply, dry rapidly and have excellent adhesion. The cured coating is flexible and adapts to the usual movements and bending without flaking.

Both products and materials (including raw materials) are subjected to control in officially approved testing facilities.

Substrate: In dry indoor climate: Plastic cable sheath compounds, metals
– the substrate must be clean and dry
– free of dust, dirt or oil
– cleaning by suction free of grease and oil

Method of application: Mat.preparation: Brushing, spraying, airless spraying Thoroughly stirring up with slow rotating mechanical mixer.

System: Renitherm® PMC. Thoroughly stir the materials with mechanical mixer. First spray on the fire protection coating so that the substrate is fully covered over (opaque). After leaving to dry over night, spray on another coat for saturation.

Technical Data	Renitherm® PMC
Consistency in supplied form	sprayable / brushable
Specific gravity	1,33 kg/l
Volume solids (m/m)	72 % ± 3 % (measured acc. to ISO 3233)
Thinner	water
Addition of thinner	up to 5 %
Spray nozzle	2,5–3,5 mm
Spray pressure on the gun	2,5–3,5 bar
In the paint container	3,0–4,5 bar
Application quantity	1.000 g/m²
Drying at +20 °C, 65 % r.h.	2–4 hrs touch dry; 24–48 hrs for complete drying. Lower temperature and higher r. h. can prolong drying time.
Flash point	–
Danger class	–
Labelling required	–
Colour	white
Supply Containers	25 kg
Shelf life	12 months in closed containers and storage temperature between +5 °C and max. +30 °C. **Protect from frost.**

Special remarks:
Exposed cable channels should be protected on all sides, even underneath. Apply a good opaque coat to the entire exposed part of the cable sheath. Spray gaps and spaces generously so that material can run into them.

When calculating amount required, surface curvature of cable must be taken into account.

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