



Melafine[®]

*The Blowing Agent
for Intumescent Coatings*

OCI

think safe. **Melafine**[®]

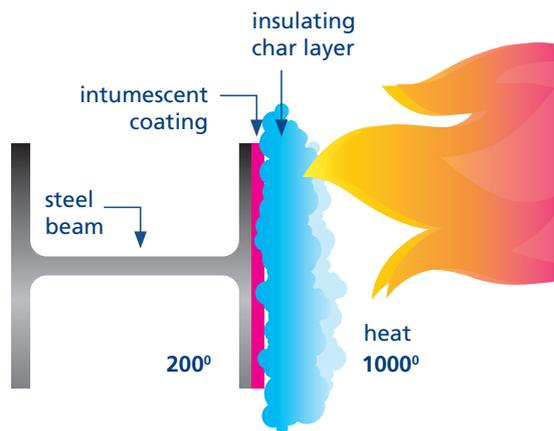
the Passive Fire Protection

Intumescent Coatings

Protecting lives, assets, data...

Intumescent Coatings are designed to buy precious, life-saving time in the event of a fire emergency. Currently intumescent coatings are most commonly applied to steel, but other applications for this type of passive fire protection are being developed.

Steel is a widely used building material because of its strength and ductility. However, steel loses its load-bearing capacity at around 550°C, which can then cause the building structure to buckle or collapse. Fire protection of steel should therefore never be compromised.



To prolong the failure time of steel during a fire and slow down the generation of heat and smoke, the substrate is generally covered with a protective intumescent coating. When exposed to a rapid temperature rise, the coating begins to form a carbon-rich layer. Melafine, acting as a blowing agent, then causes the layer to expand, resulting in a foam like char of up to 50 times its original thickness. The insulating char layer protects the substrate from heat for up to 120 minutes, allowing considerably more time for people to escape the fire.



the
finest
melamine

the Blowing Agent Melafine

Melafine ensures the protective performance *and boosts* the aesthetic appearance of an intumescent coating thanks to its narrow particle size distribution and its controlled fine particle size.

Reliable intumescent process

Effective steel protection requires an insulating char layer with complete coverage of the structure, without any cracks or fissures. A tightly controlled *narrow* particle size distribution helps to ensure a consistent swelling process. The result will be an insulating char layer with a uniform and closed cell structure.

Architectural finish

A smooth surface is the icing on the cake of architecturally exposed structural steel. Intumescent coatings, containing the finest melamine, will resemble a conventional paint and can meet the high aesthetical requirements of architects.

Melafine is halogen-free and has a tightly controlled, narrow particle size distribution to ensure a reliable and predictable intumescent process. This makes Melafine the ideal blowing agent for leading coatings producers. Its fine particle size is also fit for use in thin film coatings for architecturally exposed surfaces.

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Leading Coatings Companies
choose Melafine[®] for a
predictable and reliable
performance of their
Intumescent Coatings

www.melafine.com

OCI Nitrogen is the world's leading producer of melamine with over 50 years of experience in the business. The company is a subsidiary of OCI N.V., a global producer and distributor of fertilizer and chemicals products. OCI N.V. is listed on Euronext in Amsterdam.

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