

SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution) Coimbatore – 35



Fire retardant paints

Fire retardant paints are protective, decorative coating designed to reduce the spread of flames in the event of a fire.

Fire retardant paint is formulated with special additives that help slow the spread of flames in the event of a fire. These additives are typically based on phosphorus or nitrogen compounds, which react when exposed to heat and flame, creating an oxygen-starved environment that slows down or stops the spread of fire

Fire retardant paints contain anti fire chemicals, which decomposes and produces non inflammable gases like HCl, CO₂ and NH₃ at elevated temperatures. These gases acts as a barrier between air and inflammable substrate of the paint and thus retard the rate of burning.

Active ingredients

Anti fire Chemicals	Non-inflammable gases
Chlorinated Rubber	HCl
Carbonated pigments	CO_2
Urea- Formaldehyde	NH ₃

Uses:

- Organophosphate flame retardants (OPFRs) are widely used in textiles, electronics, and industrial materials.
- Wherever timber work is intended to be fire resistant, it may be coated with these paints.