

THERMOSET RESINS FOR FIRE RETARDANT SYSTEMS





UPR FIRE RETARDANT SYSTEMS

Unsaturated polyester resins (UPR) are the most used thermoset resins in the world because of easy application, excellent performance properties and their low cost.

A multi-ingredient combination of fire retardants turned out to make significant progress in achieving a desired fire retardancy level in thermoset resins.



PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	ELONGATION AT BREAK (%)	HDT (°C)
COLPOLY 7605 W + COLGEL GC 647	DCPD	25	2.5	95
COLPOLY 7604 D	DCPD	25	2.0	70
COLPOLY 7608	DCPD	33	3.0 – 3.5	80



HIGHLIGHTS OF OUR PRODUCTS

- medium / fast cure
- outstanding durability
- good mechanical and wetting properties
- good workability
- good thermal stability
- reduced styrene emissions
- low toxicity

SAFETY AS A TOP PRIORITY

Intumescent fire retardant (IFR) systems inhibit, suppress, and delay the production of flames to prevent the spread of fire. We gain the **precious time** we urgently need for **evacuation**.

EN 45545-2 European Railway Safety standard

Our system of resin and intumescent gelcoat meets the following requirements:

R1 – horizontal / vertical interior surfaces

R7 – Interior surfaces of gangways/Air ducts

R17 - Cab housing - External surfaces

HL 1, HL 2

TENSILE STRENGTH (MPa)	DESCRIPTION
60	Intumescent fire-retardant system approved according to EN 45545-2.
70	Pre-accelerated, non-halogenated thixotropic resin. DIN 5510 - Part 2 S4 SR2 ST2.
65	Pre-accelerated, contains barrier-forming agents to reduce styrene emission. DIN 5510 – Part 2 S4 SR2 ST2.







