TEMPRITE® ENGINEERED MATERIALS by Lubrizol

EMPOWERING MANUFACTURERS WORLDWIDE

Lubrizol



FIRE PERFORMANCE

Empowering manufacturers worldwide with engineered plastics and additives. Chemical resistance, strength, heat resistance, pressure resistance and reliability for sustainable everyday and specialist applications.

WHAT ARE TEMPRITE® **ENGINEERED MATERIALS?**

TempRite® Engineered Materials are strong, durable thermoplastic compounds produced by the post-chlorination of polyvinyl chloride resin. Originally developed by Lubrizol Advanced Materials, this resin can be formed into products that have cost-effective chemical resistance, can withstand temperatures, pressures and weather conditions.





FIRE PERFORMANCE

TempRite® materials are self-extinguishing and have high ignition resistance. They do not support combustion and will resist fire and smoke propagation.



WEATHERABILITY AND HEAT RESISTANCE

Products made from TempRite® can be formed into products that have excellent weatherability and are resistant to sunlight and UV radiation. They also offer resistance to distortion or deformation when exposed to high ambient temperatures.



RECYCLABILITY

TempRite® Engineered Materials can be both downcycled and recycled. Many local protocols allow for resins to be integrated with PVC streams to allow for recycling.



TEMPRITE® ENGINEERED MATERIALS

TRUSTED APPLICATIONS

TempRite® resins and compounds can be extruded into profiles for a variety of applications where typically, product designers and architects favour wood. This strong, long lasting alternative offers versatility, without vulnerability.

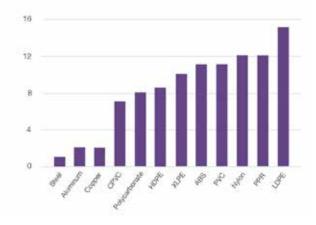


LIGHTWEIGHT BUILDING MATERIALS



Product designers and engineers factor the strength of foam based TREM into their product portfolio, especially those where a lightweight building solution along with excellent fire performance is required.

TempRite® Engineered Materials have the lowest thermal expansion of all commonly used construction polymers.



THERMAL EXPANSION OF MATERIALS



TRUSTED APPLICATIONS

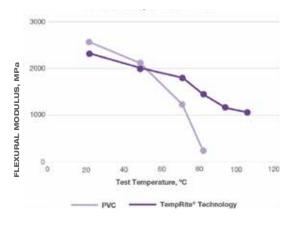


TempRite® compounds for roofing benefit from superior dimensional stability, reducing the threat long-term damage through thermal deformation. Its superior fire resistance enables structures to achieve high fire safety ratings.

FLASH IGNITION TEMPERATURES

Material	°C	°F
CPVC	482	900
PVC, Rigid	399	750
White Pine	204	400
Wood	180	356

TempRite® Engineered Materials are highly durable materials that can be used anywhere the natural and man-made corrosive elements of the outdoors traditionally cause degradation in materials.



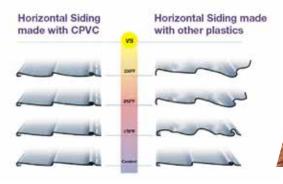
HEAT BUILDUP PERFORMANCE





TRUSTED APPLICATIONS

Dark fences, windows and shutters as well as dark siding, when exposed to sunlight, require a higher resistance to heat and UV induced degradation.





MORE APPLICATIONS OF TEMPRITE® ENGINEERED MATERIALS



Fences and Railing



Façades and Siding



Cladding



Roofing and Solar Panelling



Rainwater Transport



Windows, Doors and Blinds



Interior Walls and Partitioning



Flooring and Flooring Substrates



Light Fixture Assemblies



TEMPRITE® ENGINEERED MATERIALS

HIGH PERFORMANCE

TEMPRITE® ENGINEERED MATERIALS AS ADDITIVES

TempRite® Engineered Materials' PVC-C blends seamlessly with PVC, creating compounds with exciting new uses in modern practical applications.

Rigid PVC can be made more ductile to increase flexibility with the addition of TempRite® resins. PVC/TempRite® resin blends increase the LOI of polymers resulting in suppressed smoke density and flame retardancy, for improved fire safety ratings.

Applications such as wire and cable, flooring and substrates benefit flooring greatly PVC/TempRite® resin blends to improve heat resistance, weldability and lower gas permeability.

YOUR PARTNER EVERY STEP OF THE WAY



Since 1959, Lubrizol has been dedicated to delivering resins and compounds to residential, commercial and industrial applications.

To learn more about TempRite® Engineered Materials, or to get specific questions answered, please visit lubrizol.com/engineered-materials and we will connect you with a local representative.

