



➤ PRODUCT BULLETIN

Silcosperse™ Additive Dispersions Flame Retardants

Silcosperse™ Additive Dispersions for flame retardants that allow manufacturers to design with increased confidence for critical flame and smoke applications. These silicone additive solutions create a char or gas that reduces oxygen at the source of flame, leading to components that become self-extinguishing. Fire time to ignition is increased while heat release and fire spread are reduced, resulting in enhanced fire safety for life and property.

STAYING COMPLIANT

With an increasing demand for fire safety, fire-related legislation and restrictions have become an expectation. Using Silcosperse flame retardant additives ensures that today's stringent building safety codes and other regulations are met.

Manufacturers have the ability to design and validate to meet UL criteria, including:

- UL 94 V-0
- UL 94 V-1
- UL 94 V-2

NON-HALOGENATED CHOICES

Silcosperse flame retardants are also available as non-halogenated formulations. These more environmentally mindful choices are especially well suited for areas where smoke lessening and toxicity are of concern, such as closed spaces or restricted escape.

APPLICATIONS

- Aerospace
- Automotive
- Building & construction
- Public transportation
- Wire & cable

IMPACT

- Reduce spread of fire and heat release
- Limit quantity of smoke to allow people to find their way to safety more easily
- Limit toxicity and acidity of gases so people are less likely to be overcome by fumes
- Enhance char formation, avoiding droplets which can proliferate fire
- Meet regulation and legislation requirements



MATERIAL	PROPERTY	SILCOSPERSER FR 107443	SILCOSPERSER FR HS 107449	SILCOSPERSER FR HS-B 107453
Silicone		X	X	X
Ceramifier	Material ceramifies, it doesn't char. Ceramification prevents flaking that char can cause and creates a layer that blocks the oxygen (burning dies out without oxygen).	X	X	X
TiO2	Improves char. Being a metal it does not flake or fall apart. Allows for higher heat resistance.	X	X	X
Filler	Reduces cost	X	X	X
Platinum	Flame retardant	X	X	X
Extra	All peroxides including DBPH catalyst	X	X	X
Heat Stabilizer	Allows for higher heat in longer periods		X	X
Carbon Black	Smoke suppressant			X

Flame retardant grades may be blended to achieve desired results.

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