

FLAME RETARDANTS

FLAMEBAR FLAME RETARDING SOLUTIONS



Flamebar Flamebar Solutions are water-based, harmless to use and have negligible colour. Flamebar is a semi-durable flame retardant treatment for interior use. Since materials are so specific in the way they ignite and burn they require different solutions

[see Flamebar Solution Type Chart below].

General Application Flamebar flame retardants can be applied by dipping, spraying, padding or brushing. Use the solution as supplied or dilute with water according to the data sheet or preferably by test. It is recommended that before treating the bulk, tests on small samples are carried out to establish suitability and level of treatment required. Check appearance and flammability when dry.

- ✓ Complete and even penetration is essential for good results
- ✓ Reduced flame retardancy will be obtained if penetration is lowered by special finishes such as Scotchguard. As in other instances, penetration may be assisted by raising the temperature of the solution [60 - 80°C max]
- ✓ As a general rule, a 6 - 12% increase in dry weight of the material is required to give adequate flame resistance
- ✓ Fast colours are not normally affected
- ✓ Over-treatment may give rise to some stiffening of the fabric [excess can be removed by dry cleaning] or white-marking due to the formation of crystals [these can be removed by brushing or vacuuming]
- ✓ Flame retardancy is long-lasting but re-apply after washing
- ✓ In addition to retarding combustion, Flamebar will stop smouldering and afterglow, and will often reduce smoke emission

Flamebar Solution Type Chart

Solution	Use for
PE6	Natural fabrics & materials: cotton, linen, muslin, wool, silk, feathers, leather. Synthetic fabrics: polyester, nylon, acrylics, Dralon, polycotton, silk and artificial silk [rayon] flowers, carpets, floor coverings, wall coverings, curtains, seating, stage curtains, drapes, scenery.
N5	Wood and wood products: softwood, hardwood, plywood, chipboard, hardboard, cork, heavyweight cardboard, stage wood props, sawdust, shavings, wood nuggets, peat, bark, straw.
S1WA2	Lightweight natural materials: cotton etc., muslin, paper.

Flamebar Coverage depends on the absorbency and thickness of the material but the coverages are approximately as below:

Flamebar Coverage	m ² /L
Heavy/medium weight fabrics	4 - 6
Light weight fabric	7 - 9
Wood	4 - 6
Paper/thin card	10

NB: that non-absorbent materials are rarely successfully treated.

Flamebar	code	1 L	code	5 L	code	25 L
S1WA2	FLA030	£11.60*	FLA010	£35.26	-	-
N5	FLA032	£12.13*	FLA012	£43.04	FLA052	£170.68
PE6	FLA035	£13.22*	FLA015	£44.21	FLA055	£173.16

*One litre sizes come in spray applicator bottles.

See also COSHH/flammable Storage Cabinets [page 343] and Mylands Flame Retardant Paints [page 10]

FLORIMP K VERDE



Florimp K Verde Highly effective, concentrate non-halogen flame retarding solution for cellulose and polyester fibres. Recommended to us by the ROH production department, we have been thoroughly impressed. When testing on cheap artificial flowers from a Walworth Road pound shop [wow, do those things go up in flames or what!?!] this impressive solution completely prevented fire from

taking hold. Certified in accordance to DIN 4102 / B1 [Data sheets and test certs available in the 'downloads' section of our website]. We did find that the flowers went a bit stiff after they'd been dipped in the solution. If stiffness isn't an issue and you're working with artificial materials like Polyester, we can highly recommend this.

Florimp K Verde	size	code	price
	1 L	FLAFV01	£34.00
	5 L	FLAFV05	£135.00

Need some advice?

Some materials are easy to flame retard and some are notoriously difficult. Generally, the easy materials are the ones that will absorb the flame retarding solution. Materials such as cotton, cardboard and paper are generally easy to treat whereas non-absorbent materials such as shiny PVC and glossy plastics are very tricky and should really be treated during manufacture. It is not possible for us to supply certification to cover material that you have treated as it will depend on the substrate and method of treatment. The flame retarding solutions we sell are designed to make the materials more difficult to ignite, to slow the spread of flame and prevent smouldering. Any standards given are purely indicative of results achieved by specific tests in the past.

MSL FIRECHECK®



MSL Firecheck® A simple and effective treatment to combat fire. MSL Firecheck® is colourless and odourless and when dry is practically unnoticeable. It can be used to effectively treat any water absorbent item. MSL Firecheck® is tested to BS 5852 Part 2 [crib 5] when treating natural fibres, mixed

fibres [cotton/polyester] and synthetic fabrics such as nylon and polyester. MSL Firecheck® can also be used to treat hessian, foam rubber, untreated wood and other items that can absorb the chemical. Covers approximately 10 - 12 m² per litre. Available in 750 ml trigger spray bottles or in 5 litre and 25 litre containers.

MSL Firecheck®	code	750 ml	code	5 L	code	25 L
	FLAFC75	£9.00	FLAFC05	£50.00	FLAFC25	£212.50

ENVIROGRAF 3-2-1 SPECIAL



Envirograf 3-2-1 Special A clear odourless flame retarding solution for use on plastic artificial flowers and foliage. Will work on most absorbent plastics, nylon and other synthetics.

Envirograf 3-2-1	size	code	price
	1 L	FLA3211	£20.30
	5 L	FLA3215	£94.20

FLAMECHECK PLUS



Flamecheck PLUS This upgrade from Flamecheck has now been certified to BS5867-2 Type B: 2008 when tested on cotton, polyester, polycotton, and 4 mm plywood [please download certificated from our website "downloads" page]. A colourless, odourless, non-toxic, non-corrosive liquid that can be sprayed onto any type of material which will absorb the chemicals including both natural and mixed fibres. Always pre-test a sample before treatment. Application lasts for the useful life of material treated, though we recommend reapplication if the material get wet or is washed. 1 litre covers 320 - 376 square feet [30 - 35 m² per litre].

Flamecheck Plus	code	1 L	code	5 L	code	25 L
	FLA075	£15.00	FLA076	£62.50	FLA077	£295.00

ROSCOFLEX



Rosco Flame Retarding Solutions Rosco flame retarding products are designed to be used on scenery rather than costumes or clothing. Do not use with metallic paints. See also Roscoflamex PA in the paint additives section below.

Roscoflamex NF Add 2 - 3 parts water to provide an economical flame retarding solution for cotton and other natural fibres. Yields around 13 L of solution. Fantastic value.

Roscoflamex SF For treating synthetics, including polyester, nylon, rayon and blends. Ready to use.

Roscoflamex WD For wood products. Ready to use.

Roscoflamex DF For the treatment of most delicate fabrics with natural or synthetic fibres. Maintains the soft qualities of the fabric while providing a secure flame retarding treatment. Ready to use.

Roscoflamex PC For the treatment of most paper and cardboard products without a wax coating or other water resistant properties. Ready to use.

Roscoflamex	size	code	price
Roscoflamex NF	3.97 L	ROSNF0128	£34.00
Roscoflamex SF	3.97 L	ROSSF0128	£59.50
Roscoflamex WD	3.97 L	ROSWD0128	£59.50
Roscoflamex DF	3.97 L	ROSDF0128	£59.50
Roscoflamex PC	3.97 L	ROSPC0128	£59.50

FLAME RETARDING ADDITIVES FOR PAINT



RoscoFlamex PA Clear liquid additive that can be added to acrylic paints and glazes to make them flame retardant. One 8 oz jar treats 3.79 litres. Do not use with metallic paints.

RoscoFlamex PA	size	code	price	12+
	8 oz	ROSPA0128	£12.90	£11.82

FIRE PROTECTION PAINTS AND VARNISHES



As used on British Airways' Boeing 747s

Broflame Ultra Intumescent Emulsion Paint A water-based non-toxic intumescent emulsion paint which in a fire softens and expands to a thickness of 30 mm. This will insulate the structure from intense heat and control the spread of flame. Needs to be applied according to the application guide but typically apply at least two coats to achieve a final coverage of between 2 and 2.5 m² per litre.

SPECIFICATION: Achieves BS 476 Part 6 Class 0 [Fire Propagation] and BS 476 Part 7 Class 1 [Spread of Flame] on plywood, softwood and MDF etc. Broflame can be overcoated with flame retardant paints to achieve the desired colour [page 10].

Broflame	size	code	price
Slightly off-white	5 L	FLA061	£71.78



Bollom Intulac Ultra Intumescent Varnish For Wood Apply two coats of the clear base coat then overcoat after 8 hours, and before 18 hours, with the hard wearing protective coating which is available in matt or satin.

SPECIFICATION: Coverage: basecoat - a 5 L can will treat 12.5 m² to Class 0, topcoat - a 500 ml can will cover 12.5 m². Basecoat clean up with water. Topcoat clean up with white spirit. Go to flints.co.uk/downloads for copies of the fire certification and data sheets.

Intumescent Varnish for Wood	code	500 ml	5 L
Clear Basecoat	FLABM675B	-	£156.96
Protective Topcoat [matt]	FLABM675M	£33.49	-
Protective Topcoat [satin]	FLABM675S	£33.49	-

FIRE PILLOWS



Fire and Smoke Stop Pillows These soft pillows are used to fill voids to prevent the spread of flame. They can be useful when touring to block voids in difficult areas by the iron curtain.

Fire Pillows	code	price
Sausage	300 x 50 x 40 mm	FLAFPSAS £3.68
Fire pillow small	300 x 100 x 40 mm	FLAFPS £4.43
Fire pillow medium	300 x 150 x 40 mm	FLAFPM £5.48
Fire pillow large	300 x 200 x 40 mm	FLAFPL £6.30

AND IF THAT LOT DOESN'T WORK...



Fire Bucket A useful prop as well as a fire bucket.

Fire Buckets	code	price
Bucket	SAF327	£25.38
Bracket	SAF328	£4.78
Lid	SAF329	£6.63



Fire Extinguishers These all-purpose dry powder domestic and semi-trade extinguishers will fight most common fires [Classes A,B,C] which includes wood, paper, cloth, plastic, flammable liquids, gas and electrical fires. Both have a six-year warranty and are manufactured to BS EN 3:1996. Suitable for vehicles and boats.

Fire Extinguishers	size	code	price
Kidde Multipurpose	1 kg	KIDLSIKG	£22.99
Kidde Multipurpose	2 kg	KIDKSPD2G	£37.65