DATA SHEET

Flamebar

FLAME RETARDANTS

Highly effective economical range of water based flame retardants
tested to British Standards to improve safety on a wide range of materials
BS476 parts 6 and 7, BS5867 part 2 1980, BS3119/3120, BS5852 and BS5665

PRODUCT	FLAME RETARDS
Flamebar PE6	Natural fabrics and materials • cotton • linen • muslin • rayon • wool • silk • feathers • leather • animal skins. Synthetic fabrics - polyester • nylon • acrylics • dralon • suede • polycotton • silk and artificial silk (rayon) flowers • carpets • floor coverings • wall coverings • curtains • seating • mattress covers • foam • stage curtains • drapes and scenery.
Flamebar N5	Wood and wood products - softwood • hardwood • plywood • chipboard • weyrocboard • hardboard • insulation board • cork • heavy weight cardboard • industrial belting • stage wood props • exhibition boards • polyurethane foam • sawdust polystyrene foam tiles • wood fibre • shavings • wood nuggets • peat • bark • vacuum impregnation of wood • straw.
Flamebar S3 **May be diluted with 1 to 2 volumes of water for thin materials.**	Natural materials - economical solution • cotton • hessian • rope • sisal • woven cotton tapes and belts • canvas welding screens • tarpaulins • tent canvas • lighter weight cardboard.
Flamebar SIWA2	Lightweight natural materials • cotton etc • muslin • paper.
Flamebar ACE6	Polyester artificial flowers, plants and tree foliage.
Flamebar DP	Dried natural flowers and plants • dried grasses • dried leaves
Flamebar A fresh **Flamebar B fresh** **(with flame retardant)**	Freshener spray for artificial (polyester etc.) plant displays and dried flowers and plants. Optically dissolves dust and contamination without washing to give bright fresh clean appearance.
Flamebar Poliac **clear lacquer**	Flame retardant clear coatings for wood and other substrates. May be used on its own or on wood over Flamebar N5.

Available in 25 litre or 5 litre containers and 1 litre and 600 ml trigger sprays.

Flamebar flame retardants Application data

1. TEST	We recommend that a small sample is tested first to check suitability and application rate. Dry and test with match or suitable flame.
2. SOLUTIONS	The three main flame retardants are Flamebar PE6 for natural and synthetic materials, Flamebar N5 for wood and Flamebar S3 for economical treatment of natural materials (cotton etc.). For a general purpose solution to cover a wide variety of materials use Flamebar PE6.
3. CONCENTRATION	Use solution as supplied. Dilute only when indicated by test. Flamebar S3 is normally the only solution requiring dilution.
4. APPLICATION	Usually applied by spray or dip. Padding or brushing can be used. Overall even treatment to the correct level will achieve best results. Spray: using trigger spray, pump up horticultural spray or airless spraygun. Apply with evenly spaced horizontal and vertical strokes. One spray may be sufficient but two light sprays are preferable to one heavy treatment. With suede or pile fabrics treat mainly on the reverse side. **Dip**: Use plastic or stainless steel containers. Wet out completely, which normally only takes a minute or so. Squeeze by hand or mechanically to leave in about 70% - 100% of solution. (calc. on weight of fabric). Adapt instructions for wood, paper products, foam and wall coverings.
5. DRY	In a warm ventilated atmosphere drying will be quicker, but be aware that drying too quickly can cause white marking on the surface. A cool iron may be used.
6. COVERAGE	Depends on absorbency and thickness of the material but approximations are: Square metre/litre Heavy weight/medium wt. fabrics 4 - 6 Light weight fabric 7 - 9 Wood 4 - 6 Wood to class 1 3 - 4 Paper/thin card 10
7. TREATMENT	Will withstand dry cleaning solvents but needs re-application after washing or other exposure to water. It is long lasting in dry conditions.
8. BRITISH STANDARDS	Flamebar flame retardants have been tested on a wide variety of materials to British Standard levels as listed on fire certificate data sheet. These include BS5867 part 2 1980 flammability of furnishings standard mainly for fabrics and building regulation standard BS476 part 7 surface spread of flame and part 6 contribution to fire. These are mainly on wood and allied products.
9. FLAME RETARDANCY	It is not possible to produce a non ignitable finish on all materials. The level varies. The most effective treatments are on absorbent material like cotton and other natural fibres, wood, straw, cardboard and paper products etc. Synthetic materials are more difficult and most plastics like polythene sheeting are extremely difficult to upgrade in this way. Finishes like Scotchguard stain proofing present difficulties of penetration. Increased penetration is normally possible by adding wetting agent or raising the temperature of the solution. The purpose is to obtain the best flame retardancy possible with the particular material applying the most suitable flame retardant. This is to make the material more difficult to ignite, to slow any flame spread down to a minimum and prevent smouldering. In this way, in case of fire, it helps along with other measures to provide a time delay for people to evacuate the area safely.
10. TESTING	Flamebar will test materials in their laboratory and give free advice on suitability and level of flame retardancy achievable. Solution is not harmful used as directed, but observe normal safety precautions limiting exposure to a minimum by providing ventilation and using gloves, goggles and mask for extended spraying. Protect mirrors, exposed ferrous and decorative metal and polished surfaces. Wash with water.