


**Iscaflam<sup>®</sup>, Iscastat<sup>®</sup>**  
**Iscacide<sup>®</sup>, Iscaresist<sup>®</sup>**  
Speciality Chemicals for Textiles





**ISCA was established in 1998 with the aim of supplying high quality speciality chemicals across a broad spectrum of industry.**

Our commitment to provide expert technical support and product innovation, coupled with a professional, flexible and friendly approach to customer service, has seen ISCA quickly establish itself as a leading manufacturer and supplier in a number of fields.

Based in Newport, South Wales, we have extensive warehouse facilities throughout the UK and Europe enabling us to offer prompt deliveries from stock, as well as a full export service to overseas customers. From our purpose-built laboratories, our experienced technical team offers a full support service: providing formulatory advice, product development, raw material evaluation and end-use application testing.

Since the company's inception, ISCA has been heavily involved in the carpet and textile industries. In this time, we have successfully introduced a number of innovative products into the market, and have patented several novel technologies.

We welcome the opportunity to work closely with customers to solve their problems - either using our existing products, or with specially designed grades.

This brochure gives a brief summary of our product range for carpets and textiles. We recommend that customers also check our web site at [www.iscauk.com](http://www.iscauk.com) for further information and updates on new products.

## Iscaflam® Flame Retardants

Flame retardants are additives that are incorporated into materials to help prevent fires from starting (by providing increased resistance to ignition), or to delay the spread of a fire - allowing more time in the early stages to either extinguish the fire or to escape it. There are many types of flame retardants available, and they work in various ways (though all mechanisms are based on the removal of one or more elements of the fire triangle - HEAT / FUEL / OXYGEN). For example, water release agents cool the substrate; halogenated flame retardants remove radicals from the gas phase - reducing heat generation and the production of gaseous flammable material.

ISCA has a long history in the development of flame retardants for the textile and carpet industries.

In addition to our standard product range, we also offer tailor-made products to suit our customers' individual requirements. Our strong position in both R&D and technical service ensures that our customers have innovative, easy-to-use products that meet all relevant British and European fire standards.

The Iscaflam® range includes both traditional halogen based systems, as well as halogen-free products.

### ISCAFLAM® BL series

Iscaflam® BL products are aqueous dispersions of flame retardant chemicals, such as decabromodiphenyl ether, hexabromocyclododecane, antimony oxides, zinc borate, aluminium tri hydroxide, etc.

These products are tailor-made to provide our customers with the optimum level of performance, process characteristics, and cost.

- ✓ Easy to handle free-flowing liquids
- ✓ Excellent storage stability
- ✓ Compatible with most polymer systems
- ✓ Tailor-made to each customer's application
- ✓ Also available in non-aqueous media (DOP, DINP, chlorinated paraffin, etc.)

### ISCAFLAM® 2000 series

Cost effective alternative versions of Iscaflam® BL products, suitable for use in most textile applications.

- ✓ Based on proprietary technology
- ✓ Easy to handle free-flowing liquids
- ✓ Phosphate free
- ✓ Reduced bromine content

### ISCAFLAM® HF series

These products are halogen-free alternatives to traditional flame retardant systems. Iscaflam® HF products do not contain phosphate compounds.

- ✓ Easy to use low viscosity liquids
- ✓ Transparent appearance
- ✓ Compatible with a wide range of polymers
- ✓ Cost effective alternative to antimony pentoxide in clear coats
- ✓ UV stable

In addition to the above Iscaflam® products, ISCA also offers a wide range of standard flame retardant chemicals, such as:

- Aluminium Tri Hydroxide (ATH)
- Antimony Trioxide
- Antimony Pentoxide
- Ammonium Polyphosphate
- Decabromodiphenyl ether
- Hexabromocyclododecane
- Tris (2-butoxyethyl) phosphate (TBEP)
- Zinc borate

## Iscastat® Anti-Static Agents

Reacting to increasing customer requirements for carpet and carpet tiles to have conductive properties (anti-static) ISCA has developed a unique range of products for this market.

### ISCASTAT® ZAP series

Iscastat® ZAP products are applied as continuous films to the backs of carpets / carpet tiles to provide permanent anti-static properties. Iscastat® ZAP has a number of unique properties that makes it the technology leader in this field.

- ✓ Increases electrical conductivity to internationally recognised standards (IBM / ICL, Stroll testing, etc.)
- ✓ Easily applied by roller or spray to the rear surface of the carpet
- ✓ Low surface tension allows penetration into surfaces that are naturally water repellent
- ✓ Provides anti-static properties at various levels of relative humidity
- ✓ Contains corrosion inhibitors to safeguard production equipment
- ✓ Does not contribute to dirt pick-up on carpet
- ✓ Low toxicity – complies to EC Directive 91/155/EEC
- ✓ Iscastat® ZAP products are formulated to meet each customer's application requirements, such as drying speed, viscosity, etc.
- ✓ Low odour versions available

## Iscacide® Preservatives

Following the success of the Iscaguard® range of cosmetic preservatives, we have developed a range of industrial biocides using the Iscacide® brand.

### ISCACIDE® FRB

- ✓ Low toxicity biocide based on isothiazolones
- ✓ Continuous anti-bacterial and anti-fungal protection
- ✓ Broad spectrum of activity
- ✓ Recommended applications include shower curtains, awnings, mattress ticking, civil and military tentage, etc.
- ✓ Can also be used as a preservative for polymer dispersions, print pastes, and dispersion dyes

### ISCACIDE® FRB2

- ✓ Enhanced version of FRB with even wider biocidal activity for the most demanding applications

### ISCACIDE® AG18

- ✓ Based on silver ion technology
- ✓ Easy to apply – can be combined with other textile finishes
- ✓ Prevents microbial attack of the textile
- ✓ Long term efficiency
- ✓ Resistant to washing and dry cleaning
- ✓ Suitable for use with all types of textiles and carpets



## Iscaresist® Water Repellents

The Iscaresist® range has been developed to provide water and oil repellency for a wide variety of carpet and textile applications.

### ISCARESIST® XFL series

Iscaresist® XFL was developed as a cost effective alternative to traditional fluorine-based products.

- ✓ Easy to apply
- ✓ Does not contain fluorocarbons
- ✓ Exceptional water repellency
- ✓ Lubricating and softening effect
- ✓ Enhanced oil repellency
- ✓ Good wash resistance
- ✓ Can be used on its own, or as an extender for fluorocarbon resins
- ✓ Suitable for use with both natural and synthetic fabrics
- ✓ Typical uses include rainwear, tentage, carpets, upholstery, etc.

As with our other products, Iscaresist® XFL water repellents can be tailor-made to suit our customers' individual application methods.



## Ancilliary Products

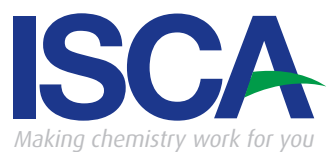
ISCA also supply a range of basic raw materials for companies formulating their own coating products. The following list highlights a few of the basic items that ISCA can supply from stock:

- Anti-foaming agents
- Carbon Black – powder or dispersion
- Foaming agents
- Hydrocarbon Resins
- Mica
- Plasticisers
- Rheological additives
- Titanium Dioxide dispersions
- Waxes – microsphere or dispersion
- Wetting agents & Dispersants

In addition to the above, ISCA also offers a sourcing service for other products based on customer requests.

## Technical Service

ISCA support their product range with a telephone advisory service and in-house testing facilities. Please contact any member of our team for further details.



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**Chemical Business Association**