

## ANTIMONY TRIOXIDE FOR ACES / COMPOSITES



## About Brenntag Specialties, Inc.:



Brenntag Specialties, Inc. (BSI) offers a wide variety of high quality products to the composites market and their allied industries.

BSI's focus is to work closely with research and development technicians to aid in the fine tuning of formulas, concentrates and compound mixtures. Our Technical Services Department and Regulatory Affairs Manager supports BSI's daily functions to help build customer satisfaction.

BSI is ISO 9001:2008 certified and is a member of NACD Responsible Distribution Process (RDP). Any one of our warehouse facilities can provide Just-In-Time delivery as well as maintain total traceability of product and lot numbers.

### About Brenntag:

Brenntag, the global market leader in chemical distribution, covers all major markets with its extensive product and service portfolio. Headquartered in Mülheim an der Ruhr, Germany, the company operates a global network with more than 490 locations in 72 countries.

In 2014, the company, which has a global workforce of more than 13,500, generated sales of EUR 10.0 billion (USD 13.3 billion). Brenntag connects chemical manufacturers and chemical users. The company supports its customers and suppliers with tailor-made distribution solutions for industrial and specialty chemicals. With over 10,000 products and a world-class supplier base, Brenntag offers one-stop-shop solutions to around 170,000 customers. This includes specific application technology, an extensive technical support and value-added services such as just-in-time de-

livery, product mixing, formulation, repackaging, inventory management and drum return handling. Long-standing experience and local excellence in the individual countries characterize the global market leader for chemical distribution.

### Antimony Trioxide

Antimony trioxide, also known as antimony oxide or  $Sb_2O_3$ , is the most widely produced compound of elemental antimony. The nations that produce the most antimony trioxide are China,



South Africa, Bolivia, Russia, Tajikistan, and Kyrgyzstan. Typical applications for antimony trioxide include flame retardant synergist for use in plastics, rubber, paints, paper, textiles, and electronics; polyethylene terephthalate polymerization catalyst; a clarifying agent for glass; an opacifier for porcelain and enamel; and a white pigment for paint. When used as a flame retardant, antimony trioxide is often used in combination with halogenated compounds. Antimony trioxide is used as a synergist to enhance the activity of the halogenated flame retardant. In the absence of antimony trioxide about twice as much halogenated compound would be needed to reach the same level of flame retardancy.

Member



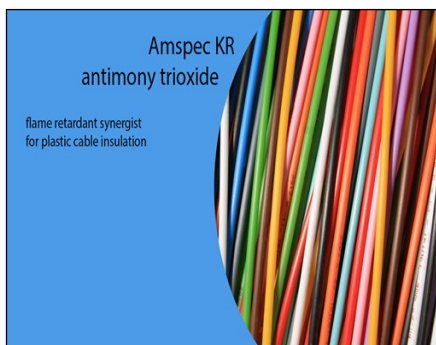
## Quality Management Registration

BSI is ISO 9001:2008  
Certified Since 1998.

### Amspec KR

Amspec KR is a grade of antimony trioxide appropriate for use as a flame retardant synergist used in combination with a halogen compound. Many materials utilize its flame retardant properties including plastics, rubber, paints, paper, textiles and electronics. Antimony trioxide is appropriate for use in polypropylene (PP), polyethylene (PE), ethylene propylene diene M-class rubber (EPDM), polyvinyl chloride (PVC), high impact polystyrene (HIPS), acrylonitrile butadiene styrene (ABS), polyurethanes, phenolics, epoxies, and many others.

Other applications of antimony trioxide include a clarifying agent for glass, an opacifier for porcelain and enamel, and a white pigment



### Amspec Select

Amspec Select is a higher purity grade of antimony trioxide compared to Amspec KR antimony trioxide. Amspec Select can be used in flame retardant applications where lead levels are of concern, like in Europe to meet the requirements of the RoHS Directive. The Select grade is also used as a catalyst in PET production.

### Amspec LTS

Amspec LTS is a grade of antimony trioxide appropriate for use as a flame retardant synergist used in combination with a halogen compound. Many materials utilize its flame retardant properties including plastics, rubber, paints, paper, textiles and electronics. Antimony trioxide is appropriate for use in polypropylene (PP), polyethylene (PE), ethylene propylene diene M-class rubber (EPDM), polyvinyl chloride (PVC), high impact polystyrene (HIPS), acrylonitrile butadiene styrene (ABS), polyurethanes, phenolics, epoxies, and many others.

LTS is specifically for applications where you need to minimize the tinting strength of antimony trioxide. This low tinting strength grade means you can use less pigment to achieve your desired color specification.



### Amspec SP

Amspec SP is the highest purity antimony trioxide Amspec offers. Amspec SP is suitable for highly lead and/or arsenic sensitive applications.







