

QSP™-HS1 Heat Shield Paper

QSP™-HS1 is a thin, flexible insulation made from high-temperature Fiberfrax® refractory ceramic fiber. It has been specially formulated to be a strong, easy-to-handle paper with a significantly reduced organic content. As a result, QSP-HS1 is ideal for use in automotive heat shields, or any application that requires a minimized loss on ignition.

Loss on Ignition (LOI)

Typical ceramic fiber paper can contain up to 10% organic binder. These organics, which give added strength to the paper during assembly, burn off upon first exposure to high temperature. This initial burn-off, known as LOI, can produce quantities of smoke and flame which may be undesirable in certain applications.

Due to its unique composition, QSP-HS1 contains less than half the organic binder of typical ceramic fiber paper. As a result, it is far less likely to produce unwanted levels of smoke and flame, and has proven itself in OEM testing to be suitable for passenger car heat shield applications.

Excellent Workability

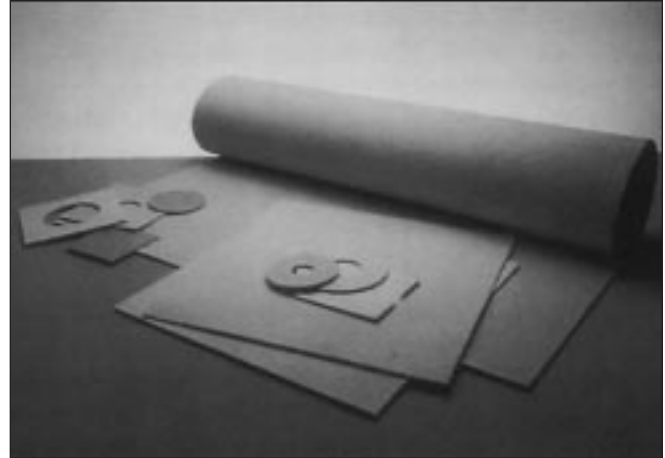
Even with its reduced organic binder content, QSP-HS1 is strong enough to be rolled, die cut, and formed into various shapes. It is designed to be used in the same manner as standard-grade ceramic fiber paper.

Furthermore, QSP-HS1 is preferred in automatic die stamping operations, as it is made from fiber that has been washed to a fiber index of 70%. This washing process both increases material uniformity, and removes a large portion of the naturally occurring un-fiberized "shot" which can lead to excessive die wear.

QSP-HS1 is produced in accordance with TS 9000 standards.

Worldwide Technical Support

Unifrax is a worldwide sales and service organization with several international locations and representatives. The services that we provide include thermal modeling, system design engineering assistance, and failure analysis, as well as technical exchange programs. For additional information regarding QSP-HS1, or any of our specialty insulations, please contact the Unifrax Application Engineering Department at aecoordinator@unifrax.com.



Physical Properties

Temperature Limit	1260 C
Loss on Ignition (Organic Content)	1.5-3.5%
Tensile Strength	> 170 kPa
Fiber Index	70%
Nominal Thickness	3.2mm

Data are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes.

Refer to the product Safety Data Sheet (SDS) for recommended work practices and other product safety information.

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