

X-23-8117

Description

Shin-Etsu's X-23-8117 product offering is a thermal interface material developed and manufactured with ease of application in mind. Specifically formulated to include an application chemical optimized for screen printing and other application techniques, X-23-8117 outperforms in high volume manufacturing environments. With high Thermal Conductivity coupled with low Thermal Resistance, this product often exceeds thermal management requirements of high-performance semiconductor devices. Through superior heat dissipation, X-23-8117 allows electronic devices to remain cooler and increases long-term reliability.

Key Features and Benefits

- Excellent thermal resistance and thermal conductivity
- Low viscosity at the time of application, easily applied via dispensing, stencil printing, or screen printing methods
- Stable homogeneous mixture
- RoHS and REACH Compliant
- High Reliability
- Highly resistant to pump-out even in vertical applications
- Excellent thermal performance at variable Bond Line Thickness (BLT) Thick or Thin

Typical Physical Properties

Attributes	Values
⁽¹⁾ Color	Gray
⁽¹⁾ Viscosity (Pa-s)(pre-flash)	80
⁽²⁾ Viscosity (Pa-s)(post-flash)	700
⁽³⁾ Thermal Resistance (mm ² -K/W)	6.1
Thermal Conductivity (W/m °K) (post-flash)	6.2
BLT (um)	26

(1) See page 3 for data

(2) Measured with laser-flash

(3) Measured with hot disc method

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Packaging

SEM's X-23-8117 material is available in several effective packages offering unique advantages:

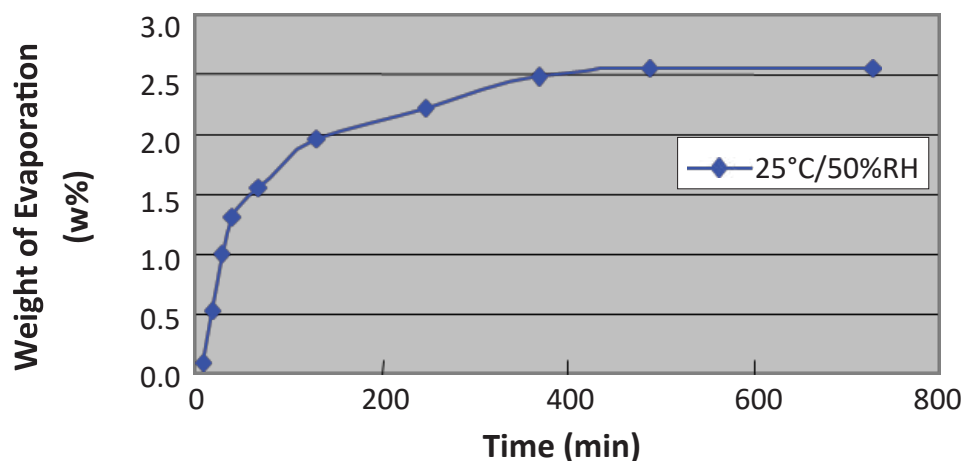
- Syringes offer the most flexible, single application use, with the ability to utilize the same product package for production and field requirements.
- Cartridges can be utilized with either manual, automated or silk-screening equipment. The delivery system allows dispensing of the material, while protecting the integrity and exposure level of the unused portion.
- Bulk purchases are available for large scale production facilities where material is consumed at a rapid rate.

Packaging Description	Size
Syringes (grams)	0.5, 1, 1.5, 3
Cartridges	55g
Bulk	1 kg can
Custom Sizes	Contact account manager for custom sizes
Storage Conditions	32°F - 85°F

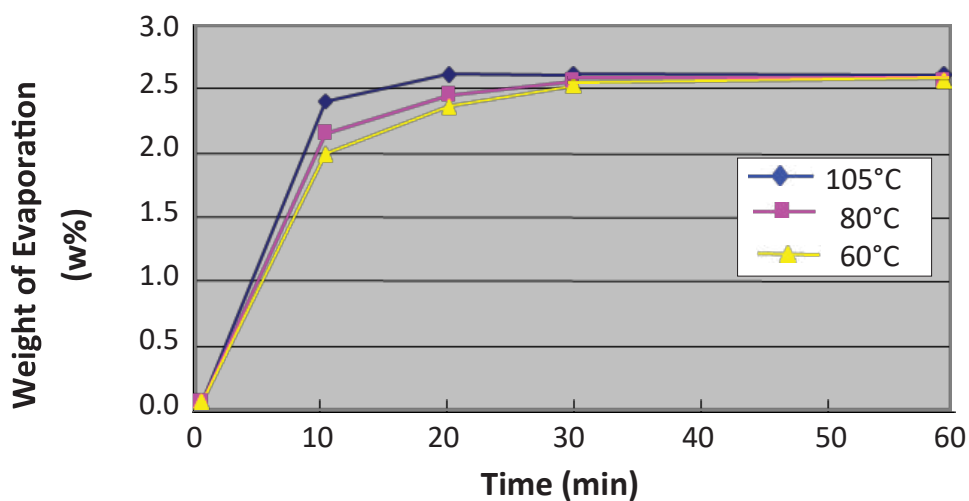
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Application Chemical
Flash off rate



Application Chemical



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Shin-Etsu MicroSi (SEM) has been notified by customers that they were negatively impacted by using unauthorized and/or counterfeit thermal interface materials being sold as Shin-Etsu materials. Please note that Shin-Etsu Chemical Co., Ltd. and Shin-Etsu MicroSi, Inc. are not in a position to take any responsibility for the said unauthorized materials. Feel free to contact SEM, if you have any questions regarding this. To ensure safety, follow the precautions stated in the material safety data sheet and technical references. Typical values of different parameters have been shared in this sheet. It's the responsibility of the Purchasers to qualify the products for their respective applications. The contents in this document are subject to revision without notice to reflect latest data.

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