HTI series getters

High Capacity getters for hermetically sealed devices

Based on well established zeolite technology with additional precious metals for tailored absorption, these materials offer a highly flexible getter system. HTI materials have been developed with a unique polymeric binder which allows them to withstand processing temperatures of up to 325 °C.

HTI getters are supplied as a cured deposition on a suitable substrate (typically a package lid). Once cured this substance will not outgas any organics into the housing (TGA analysis is available to support this).

This material is suitable for a wide range of packaging types and applications.

**Versions available -**

<table>
<thead>
<tr>
<th>Ink</th>
<th>Moisture PU wt % (Min)</th>
<th>Organic PU wt %</th>
<th>Av. Hydrogen (cm³/g of sample)</th>
<th>Temperature Stability °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTI 1</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>325</td>
</tr>
<tr>
<td>HTIR 2</td>
<td>15</td>
<td>-</td>
<td>50</td>
<td>325</td>
</tr>
</tbody>
</table>

Density of cured getter is 1g/cm³

Maximum processing temperature - 325°C;
Maximum operating temperature 250°C, Moisture getter effective up to 100°C. Hydrogen getter is unaffected by temperature.

Material is fully RoHS & REACH compliant.

**HTIR 2 also acts as an absorber of IR wavelength light.** This means that the getter can also act as an effective anti-reflective coating in certain optical devices.
Typical performance characteristics of HTI series getter

Typical Getter Activation

Fast activation times at modest temperatures

Lower temperature activation also possible under higher vacuum conditions.

Activation profiles can often be tailored to match existing pre-lid bake operations

Getter performance (typical)

Moisture capacity still significant even at elevated temperatures.

Hydrogen capacity is not affected by temperature

Moisture capacity loss upon atmospheric exposure

Getter should remain in dry nitrogen after activation to prevent re-absorption of moisture from the atmosphere.

If necessary the getter can be reactivated up to 10 times without loss of performance.

Hydrogen capacity is not affected.

Contact :

Hi Rel Ltd
Fuller Road
Harleston
IP20 9EA

Tel - +44 1379 853944
Email - richard@hirel.co.uk