Aqueous Acrylic Pressure Sensitive Adhesives for Protective Applications
The ROBOND™ PS-1000 series of aqueous acrylic pressure sensitive adhesives is suitable for various protective applications. These systems provide performance suitable for metal, uPVC profile, Plastic Sheet, Glass, Textile and Carpets.

The chart below shows a summary comparison of the new ROBOND PS-1000 series of Pressure Sensitive Adhesives.

<table>
<thead>
<tr>
<th>Adhesion Level</th>
<th>Adhesive</th>
<th>TS%</th>
<th>pH</th>
<th>Tg (°C)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>ROBOND PS-1020</td>
<td>54.5</td>
<td>8.3</td>
<td>-45</td>
<td>Low peel build, good Plasticizer Migration Resistance (PMR)</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>ROBOND PS-1031</td>
<td>54</td>
<td>8.6</td>
<td>-29</td>
<td>High temperature resistance, good PMR</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>ROBOND PS-1040</td>
<td>53</td>
<td>9.0</td>
<td>-48</td>
<td>General purpose, good base for formulating, medium tack</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>ROBOND PS-1049</td>
<td>56</td>
<td>6.5</td>
<td>-40</td>
<td>Low peel build, excellent x-linker response</td>
</tr>
<tr>
<td>HIGH</td>
<td>ROBOND PS-1067</td>
<td>51</td>
<td>7.5</td>
<td>-31</td>
<td>Good adhesion to Low Surface Energy materials</td>
</tr>
<tr>
<td>HIGH</td>
<td>ROBOND PS-1089</td>
<td>50</td>
<td>7.3</td>
<td>-33</td>
<td>High cohesion, water whitening resistance</td>
</tr>
</tbody>
</table>

PSA PERFORMANCES

Depending on the performance balance required in the applications, one can choose from the six different adhesive profiles and customized performance by adjusting the crosslinker formulation in the ROBOND PS-1000 series.

PROCESSABILITY AND FORMULATION

ROBOND PS-1000 series is specially designed to be direct coated on polyolefin films for protective applications. For transfer coating or formulation, please contact your Rohm and Haas Sales Representative or Technical Service for further information.

MIXING

It is necessary that Crosslinker CR-3 or CR-4 corectant be added to ROBOND PS-1000 series with agitation. Prior to adding the crosslinker, use a mechanical mixer to stir the adhesive from ROBOND PS-1000 series with enough speed until a vortex is formed, ensuring that the adhesive is drawn from the sides and bottom of the mixing vessel. Slowly charge the appropriate amount of crosslinker at the edge of the vortex and continue mixing for 5-10 minutes.

POT LIFE

The average pot life of the formulated ROBOND PS-1000 adhesives is approximately 8 hours with CR-3 and approximately 24 hours with CR-4. (Pot Life can vary based on the amount of coreactant and the environmental temperature).

CLEANING

Drain the adhesive from the cylinder, pan and reservoir and dispose in accordance with state and local laws. Do not allow wet parts to dry out. Immediately rinse with tap water to remove the bulk of the adhesive residue. Follow by cleaning all wetted parts with ethyl acetate or other suitable solvents to remove any further residue.
Due to their chemical nature (pure acrylic polymers), ROBOND PS-1000 series present higher UV and temperature resistance than most of the adhesives used for protective applications. We recommend that you make your own determination on the suitability of ROBOND PS-1000 series for your particular application.

**ROHM AND HAAS**

**SELECTION CHART BY APPLICATIONS**

<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Metal</th>
<th>Coated</th>
<th>Extruded Profile</th>
<th>Plastic Sheet</th>
<th>Textile / Carpet</th>
<th>Glass</th>
<th>Isocyanate*</th>
<th>Carbodiimide**</th>
<th>Aziridine***</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROBOND PS-1020</td>
<td>●</td>
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* CR-3 Polyisocyanate dispersible (available from Rohm and Haas)
** CR-4 safe and environmental friendly, non toxic, VOC free, outstanding pot life (available from Rohm and Haas)
*** Aziridine must be handled according to Safety Data Sheet

**ROBOND™ PS-1049**

Graph below shows typical performances that one can obtain using ROBOND PS-1049 with different CR-3 crosslinker level.

**AGING PERFORMANCE**

Due to their chemical nature (pure acrylic polymers), ROBOND PS-1000 series present higher UV and temperature resistance than most of the adhesives used for protective applications. We recommend that you make your own determination on the suitability of ROBOND PS-1000 series for your particular application.
SAFE HANDLING INFORMATION

Rohm and Haas maintains comprehensive and up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Rohm and Haas recommends that you obtain copies of our Material Safety Data Sheets from your local Rohm and Haas representative on each of our products prior to its use in your facilities. We also suggest that you contact your supplier of other materials recommended for use with our products for appropriate health and safety precautions prior to their use.

ABOUT US

Rohm and Haas is a world class integrated polymer supplier and formulator of adhesives, sealants and complementary products. Our global presence, extensive technology portfolio, worldwide infrastructure and network of plants, technical service and sales offices provide customers with a wide range of capabilities and depth of resource unmatched by any other chemical company.

For more information, visit us at:  
www.rohmhaas.com

Or e-mail us at:  
poweratwork@rohmhaas.com

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