

Shelf-Life and Proper Storage of PORON® Cellular Urethane Materials

As with many materials that are ordered in large quantities, there is occasionally a time lapse between the purchase of PORON® Urethanes and the production of the finished part. Periodically questions arise about the optimum methods of storage in order to maintain product quality and provide the longest possible shelf life.

Proper Storage Conditions

The shelf life of PORON Urethane Materials depends upon the environment in which they are stored. Exposure to elements such as ultraviolet rays, high temperatures, and elevated moisture or humidity can have an adverse affect on the overall storage life of the material. It is recommended that PORON materials be stored at the following conditions:

- Temperature range between 15-27°C (60-80°F)
- Humidity range between 40-50%
- No direct exposure to sunlight



Shelf Life

Properly stored PORON Urethane Materials generally have long shelf lives. Assuming storage at the recommended conditions, Rogers Corporation offers as a recommendation, a five year shelf life from the date of manufacture for all PORON materials with the exception of PORON Foam Tape, ThinStik® and Condux Plus™ products. The recommended shelf life from the date of manufacture for PORON Foam Tape and ThinStik products is two years and the Condux Plus products is one year when stored in accordance with the conditions noted above. Because it is not always possible to ascertain that proper storage conditions have been maintained over an extended period of time, Rogers Corporation recommends that customers test all materials that have been so stored to ensure that they are suitable for the intended use.

Past experience has shown that PORON urethanes generally demonstrate little or no degradation in their original properties well past five years. However, good practice requires that steps such as dating and rotating inventory be used to help ensure the materials are put into use as quickly as possible. These recommendations apply only to PORON Urethanes in roll form. Conditions may vary once the material has been altered in any way, such as being cut or laminated. Also, materials not produced by Rogers, such as adhesives, have their own, and possibly shorter, shelf life.

To help keep track of the manufacture date, all rolls of PORON materials are labeled in several places with their lot number. An example of how to read a Rogers' lot number is provided below:

Year	Month	ERP Coding	Roll Number
14	H	03301	007

The first two characters of the lot number refer to the year of production. The letters A-L are used to represent the production month, and form the third character in the lot number. The last two groups of numbers are mainly for internal references and traceability purposes. The lot number dissected above would be seen as 14H03301007 and would have been manufactured in August 2014. A material's lot number can be found on the label inside the roll core and on the cardboard identification tag at the end of the roll, pictured above.



Finally, Rogers Corporation realizes that on occasion materials will not be converted to their finished parts within the recommended shelf life. Since PORON Urethanes may or may not undergo degradation or loss of product quality in these situations, depending on, among other things, storage conditions, it is important that the customer test the material to verify that it is suitable for the desired use. There are several testing methods that can be used to verify sustained quality, including compressive force deflection, tensile strength, elongation and various compression-set tests. Comparing these physical properties to those listed on the material's physical property data sheet is the best evaluation method.

Discussions on these testing methods or specific results, as well as any other specific storage questions, can be directed to your local Rogers Sales Engineer.

The information contained in this bulletin is intended to assist you in designing with Rogers' High Performance Foam Materials. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown on the Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers' High Performance Foam Materials for each application. The Rogers logo, The world runs better with Rogers., PORON, Condux Plus and ThinStik are licensed trademarks of Rogers Corporation. © 2010, 2014 Rogers Corporation, All rights reserved. Printed in U.S.A., 1014-PDF, **Publication #17-127**