



C - 1509

Uretano Para Vaciados Semi-Rígido

REVISION GENERAL

C-1509 es un plástico de uretanos para vaciados semi-rígidos (tiene alguna flexibilidad) fuerte y muy resistente. Originalmente hecho para herramientas de alto impacto (golpe de martillo), C-1509 también ofrece buena resistencia al desgaste y químicos y es ideal para una gran variedad de aplicaciones industriales. *Este producto es bueno para algunas aplicaciones de FDA/USDA –comida seca solamente.* Las cuales incluyen partes resistentes al desgaste, fundiciones, encapsulación, rodillos, union de metales y amortiguadores.

REVISION TECNICA

Valores: ~Mezcla: Uno por Uno por peso. ~Color: Amber Cremoso ~Shore D Dureza: 60
~Pot Life: 20 mins. ~Gel Time: 30 mins. ~Tiempo De Desmoldaje: 16 hrs ~Curado Total: 7 días@ 25°C

Descripción: C-1509 consiste de un componente de dos líquidos, Parte A (etiqueta amarilla) y Parte B (etiqueta azul). Cuando se combina en una mezcla de uno por uno por peso, C-1509 cura a un plástico durable.

COMPONENTES	COLOR	VISCOSIDAD	S.G. g/cm ³	S.V. cu. in./lb.
Mezcla Parte A+B	Amber Cremosa	2,000 cps	1.12	24.7

Ultima Resistencia A Tensión: 2,500 PSI Encojimiento: 0.0024 in./in. Exotérmico (1,000g mass) 80°C/120°F

Preparación

Poniendo Un Agente Desmoldante

Midiendo

Preparación . . . Materiales deben guardarse y usarse en temperaturas tibias (72° F / 23° C). Herramientas de mezclar y contenedores deben estar limpios, secos y hechos de metal, plásticos ó vidrio. Mezclado debe hacer en una area bien ventilada. El uso de guantes de latex y camisa manga larga es recomendado para evitar el contacto con la piel. (Referirse a la información de seguridad al revers del boletín técnico).

Poniendo Un Agente Desmoldante . . . C-1509 es bueno para vaciados sobre una gran variedad de moldes y superficies, pero se pueden adherer si al superficie no ha sido preparada apropiadamente. Superficies porosas como Madera, piedra, y yeso deben ser selladas. Buenos selladores incluidos **Superseal** ó **Ease Release 2831** (ambos de Smooth-On). **Moldes de Poliuretanos** deben estar secos y requieren una capa de un buen agente desmoldante, como **Universal Mold Release** (de Smooth-On). Para metales y otras superficies no porosas la aplicación de un agente desmoldante es usualmente suficiente.

Midiendo . . . La mezcla a apropiada es 100 Partes de Parte A a 100 Partes de Parte B por peso. Debes usar una balanza muy precisa (de gramos ó triple beam balance scale) para pesar estos componentes apropiadamente. Dispensa la cantidad requerida de Parte A en la vasija de mezclar. Pesa la cantidad apropiada de Parte B y combinalo con Parte A. **IMPORTANTE:** La vida del producto es drásticamente reducido despues de abierto. Inmediatamente reemplaza las tapas de los contenedores despues de usarlo. Usar el material restante lo más pronto posible.

Mezclando & Vaciando

Mixing . . . Mix for 90 seconds making sure that you scrape the sides and bottom of your container several times. If coloring or filling C-1509, add filler or pigment dispersion to Part B and mix thoroughly before adding Part. A.

If **vacuum degassing** prior to pouring, subject mixture to 29 h.i.g. mercury in a suitable vacuum chamber for 2-3 minutes or until mixture rises, breaks and falls. Allow for 3 to 4 times volume expansion in mixing container.

Pouring . . . If casting **C-1509** into a rubber mold, pour mixture in a single spot at the lowest point of the mold. If encapsulating an object, do not pour the mixture directly over the object. Let the mixture seek its level. A uniform flow will help minimize entrapped air.

For Best Results . . . Best results are obtained using a **pressure casting technique**. After pouring the mixed compound, the entire casting assembly (mold, dam structure, etc.) is placed in a pressure chamber and subjected to 60 PSI (4.2 kg/cm²) air pressure for at least two hours.

Curing

Post Curing

Casting Thickness

Regular Cure . . . For most applications, room temperature curing (70 F/ 22 C) for 16 hours is adequate. Castings will reach ultimate physical properties at room temperature in 5 - 7 days.

Adding So-Cure Accelerator . . . The cure time of C-1509 can be accelerated by adding So-Cure Accelerator (available from Smooth-On or your distributor) in various proportions. For example, by adding 0.5% So-Cure to a 100 gram casting, the gel time of C-1509 will be shortened to 2.5 minutes. In this proportion, castings of C-1509 will achieve a Shore D Hardness of 73 after 3 hours at 25 C.

Post Curing . . . Castings will cure faster and achieve maximum physical properties and heat resistance if C-1509 is post cured. Post curing is recommended if castings are thin or of low mass concentration. Castings should be post cured in a mold or support structure. Allow the material to cure for 6 - 8 hours at room temperature followed by 16 hours at 150 - 160 F (65 - 72 C). The casting or part should be allowed to cool to room temperature before demolding.

If you are pouring less than 1/4 in./.64cm of material, the casting should be heat post cured. If desired thickness is greater than 3 in./7.62cm, it is recommended that consecutive casts be made (one pour on top of another) with 30 minutes in between each casting to allow for heat dissipation.

Safety First

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The Material Safety Data Sheet (MSDS) for this or any Smooth-On product should be read prior to use and is available upon request from Smooth-On. All Smooth-On products are safe to use if directions are read and followed carefully.

Be careful. C-1509 Part A contains methylene diphenyl diisocyanate. Vapors, which can be significant if heated or sprayed, may cause lung damage and sensitization. Use only with adequate ventilation. Contact with skin and eyes may cause severe irritation. Flush eyes with water for 15 minutes and seek immediate medical attention. Remove from skin with waterless hand cleaner followed by soap and water Refer to MSDS.

Important: The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therein.

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