



Advanced Materials

CG-1305 Resin/Hardener

EPOXY SYNTACTIC

- Medium Density Syntactic
- High Strength
- Pourable

DESCRIPTION:

CG-1305 resin/hardener epoxy syntactic is a medium-density, pourable material for aircraft production and other industrial applications requiring high strength and low weight. This system combines good handling and good physical properties. CG-1305 resin/hardener epoxy syntactic is designed for reinforcing high stress areas in honeycomb structures and for potting applications. CG-1305 Resin / Hardener epoxy syntactic is qualified to BMS 5-28, Type 7, Class 1.

TYPICAL PROPERTIES AS RECEIVED:

<u>Property</u>	<u>Resin</u>	<u>Hardener</u>	<u>Mixed</u>	<u>Test Method</u>
Color	White	Amber	Off-White	Visual
Density, g/cc	0.82	0.98	0.90 max.	ASTM-D-792
Viscosity, cP at 77°F (25°C)	90,000	450	21,500	ASTM-D-2196
Gel Time, 60 g mass at 77°F (25°C)	--	--	>60 min.	ASTM-D-2471

MIX RATIO :

To 100 parts by weight of CG-1305 resin, add 20 parts by weight of CG-1305 hardener. Mix both components thoroughly for several minutes to insure complete and uniform mixing.

CURE SCHEDULE:

Cure #1 - 7 Days @ 77±2°F (25°C ±1°C)

*Cure #2 - Gel @ Room Temperature + 90 minutes @ 260±10°F (127°C±6°C)

Cure #3 - Gel @ Room Temperature + 60 minutes @ 350±10°F (177°C ±6°C)

*Optimum cure

TYPICAL CURED PROPERTIES (Not for specification purposes)

Test	Results	Test Method
Compressive strength/modulus, Ksi (MPa) after 7 days at 77±2°F (25°C±2°C)	8.5/400 (58.6/2,758)	ASTM-D-695
after R.T. gel + 90 minutes at 260°F±10°F (127°C±6°C)	8.8/420 (60.7/2,896)	--
after R.T. gel + 60 minutes at 350°F (177°C)	9.0/450 (62/3,103)	--
Lap shear, AL/AL, psi (MPa) after 7 days at 77±2°F (25°C±1°C)	1500 (10.3)	ASTM-D-1002
after R.T. gel + 90 minutes at 260±10°F (127°C±6°C)	1800 (12.4)	--
after R.T. gel + 60 minutes at 350±10°F (177°C±6°C)	1800 (12.4)	--
Weight gain % after 24 hour immersion TT-S-735 test fluid	0.30	ASTM-D-543
Mil-M-5606 hydraulic fluid	0.40	--
Skydrol 500	0.60	--
Distilled water	0.50	--
Flammability, Horizontal Direction (15 seconds ign.) Burn Rate, inches per minutes (mm / min.), maximum	3.0 (76)	--

STORAGE:

CG-1305 resin/hardener should be stored in a dry place, in the sealed original container, at temperatures between 40°F and 90°F (+4.5°C and +32.2°C). The product should not be exposed to direct sunlight. Under these storage conditions, and when supplied under Huntsman standard certification, this product has a shelf life of 1 year (expiration date may differ based on customer specification).

Material temperatures should be above 18°C (65°F) when mixing. Tightly reseal containers after use.

When exposed to cold temperatures over extended periods of time, some small globules may form within the resin component (this condition may also be referred to as "caking"). Per BMS 5-28, Type 7, Class 1, CG 1305 Resin / Hardener can be restored to its original condition by gently heating the component to 120 °F ± 5 °F for 24 hours, or until material is fully dispersed. The material should be allowed to cool down to room temperature prior to mixing the resin and hardener together for further processing.

PRECAUTIONARY STATEMENT:

Huntsman Advanced Materials Americas LLC maintains 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. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to MSDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN**FOR PROFESSIONAL AND INDUSTRIAL USE ONLY**

Distributed by
Freeman Manufacturing & Supply Co.
www.freemansupply.com (800) 321-8511



IMPORTANT LEGAL NOTICE

Sales of the product described herein ("Product") are subject to the general terms and conditions of sale of either Huntsman Advanced Materials LLC, or its appropriate affiliate including without limitation Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., or Huntsman Advanced Materials (Hong Kong) Ltd. ("Huntsman"). The following supersedes Buyer's documents.

Huntsman warrants that at the time and place of delivery all Products sold to Buyer shall conform to the specifications provided to Buyer by Huntsman.

While the information and recommendations included in this publication are, to the best of Huntsman's knowledge, accurate as of the date of publication, NOTHING CONTAINED HEREIN (EXCEPT AS SET FORTH ABOVE REGARDING CONFORMANCE WITH SPECIFICATIONS PROVIDED TO BUYER BY HUNTSMAN) IS TO BE CONSTRUED AS A REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS, OR WARRANTIES AS TO QUALITY OR CORRESPONDENCE WITH PRIOR DESCRIPTION OR SAMPLE, AND THE BUYER ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH PRODUCT, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES.

No statements or recommendations made herein are to be construed as a representation about the suitability of any Product for the particular application of Buyer or user or as an inducement to infringe any patent or other intellectual property right. Buyer is responsible to determine the applicability of such information and recommendations and the suitability of any Product for its own particular purpose, and to ensure that its intended use of the Product does not infringe any intellectual property rights.

The Product may be or become hazardous. The Buyer should obtain Material Safety Data Sheets and Technical Data Sheets from Huntsman containing detailed information on Product hazards and toxicity, together with proper shipping, handling and storage procedures for the Product, and should comply with all applicable governmental laws, regulations and standards relating to the handling, use, storage, distribution and disposal of, and exposure to the Product. Buyer shall also take all steps necessary to adequately inform, warn and familiarize its employees, agents, direct and indirect customers and contractors who may handle or be exposed to the Product of all hazards pertaining to and proper procedures for safe handling, use, storage, transportation and disposal of and exposure to the Product, and the containers or equipment in which the Product may be handled, shipped or stored.

© 2014 Huntsman Advanced Materials Americas Inc.

Main Offices :
Huntsman Corporation
10003 Woodloch Forest Dr.
The Woodlands
Texas 77380
(281) 719-6000

**Huntsman Advanced Technology
Center**
8600 Gosling Rd.
The Woodlands
Texas 77381
(281) 719-7400

Distributed by
Freeman Manufacturing & Supply Co.
www.freemansupply.com (800) 321-8511

