

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 physical properties. CG-1305 resin/hardener epoxy syntactic is designed for reinforcing high stress areas in honeycomb structures and for potting applications. CG-1305 R/H 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
Shelf life at 77°F (25°C), unopened, months	12	12	--	--

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)

<u>Test</u>	<u>Result</u>	<u>Test Method</u>
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, Burn Rate, in./min. (cm/min), max.	3 (7.6)	--
12 second vertical burn		

STORAGE/ Syntactic epoxy resins and hardeners should be stored in a dry place in their original, sealed

SHELF LIFE : containers at temperatures from 60-90°F (16-32°C). Material temperatures should be above

65°F (18°C) when mixing. After use, tightly reseal containers. Frozen materials should be stored at 0°F (-18°C) or colder and allowed to thaw at room temperature before use.

Under these conditions, syntactic epoxy resins and hardeners will remain useable for 12 months from date of shipping from Huntsman.

CAUTION :

Huntsman Advanced Materials Americas Inc. 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. Copies of the latest MSDS may be requested by calling our customer service group at 800-367-8793 or emailing your request to adhesives_group@huntsman.com.

FIRST AID !

Eyes and skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

Inhalation: Remove subject to fresh air.

Swallowing: Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

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

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 supercedes 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.

© 2006 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