

Epibond® 1210 A Resin / Hardener 9861 Epoxy Adhesive

Product Description

Epibond® 1210 A / Hardener 9861 epoxy adhesive is a two-part paste which gives good properties at temperatures up to 300°F (149°C). This adhesive product is ideal for spacecraft applications due to its low out-gassing properties. Epibond® 1210 A / Hardener 9861 epoxy adhesive mixes to a semi-paste consistency and may be applied in glue lines of up to 50 mils for gap-filling applications. Epibond® 1210 A / Hardener 9861 epoxy adhesive bonds metals, composite laminates, most thermoplastics, rubbers and many other dissimilar materials. The epoxy adhesive is also available in different work life versions – Epibond® 1210A/B epoxy adhesive and Epibond® 1210 A / Hardener 9861 epoxy adhesive.

Features

- High service temperature
- Low outgassing
- One hour work life

Typical Properties*

Property	Test Method	1210 A Resin	Hardener 9861	Mixed System
Appearance	Visual	Tan	Amber	Tan
Density at 25°C, g/cm ³	ASTM D792	1.49	1.00	1.35
Viscosity at 77°F (25°C), cP	ASTM D2196	250,000	16,000	Semi-Paste
Gel Time, 100g at 77°F (25°C), min	ASTM D2461	--	--	35 - 60

*Properties are based on Huntsman test methods. Copies are available upon request.

Processing

Mix Ratio

Product	Parts by weight
Epibond® 1210 A Resin	100
Hardener 9861	20

Processing Data

Parameter	Value
Typical cure cycles	48 hours at 77°F (25°C) or *Gel at room temperature + 1-2 hours at 150°F (66°C)

*elevated temperature properties are improved with port cure of one hour at service temperature.

Typical Physical Properties

Unless otherwise stated, the data were determined with typical production batches using standard test methods. They are typical values only, and do not constitute a product specification.

Property	Test Method	Value
Tensile lap shear, Al-Al, psi (MPa) 77°F (25°C) 200°F (93°C) 300°F (149°C)	ASTM D1002	2,800 (19.3) 2,500 (17.2) 500 (3.4)
After fluid Immersion, 7 days at 75°F (23°C), psi (MPa) JP-4 Skydrol Distilled water	ASTM D1002	2,700 (18.6) 2,400 (16.5) 2,400 (16.5)
Outgassing, % TML CVCM	ASTM E595	0.77 0.00

Storage

Epibond® 1210 A Resin / Hardener 9861 should be stored in a dry place in the original sealed containers at temperatures between 2°C and 40°C (36°F and 104°F). After use, tightly reseal containers. Under these storage conditions, and when supplied under Huntsman standard certification, the product has a shelf life of **1 year** (from date of shipment). The product should not be exposed to direct sunlight.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) 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 SDS as mentioned above.

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.

Epibond is a registered trademark of Huntsman LLC or an affiliate thereof in one or more, but not all countries.

© 2015 Huntsman Advanced Materials Inc.

Main Offices:

Huntsman Corporation
10003 Woodloch Forest Dr
The Woodlands, TX 77380
888-564-9318

Huntsman Advanced Technology Center
8600 Gosling Rd.
The Woodlands, TX 77381
281-719-7400