Advanced Materials Technical Datasheet



VERSAMID® EH-50 Curing Agent

Product Description

VERSAMID® EH-50 curing agent is a tertiary amine accelerator and curing agent for epoxy coatings and adhesives, as well as polyurethane foam systems. This formaldehyde-free amine induces fast reactivity with polymercaptan, polyamide, polyamine and polyisocyanate resins.

Applications

- Coatings
- · Concrete patching compounds
- Adhesives
- Electrical potting and encapsulation
- Urethane foams
- · Laminates and low color castings

Features

- Non-corrosive
- Accelerator and catalyst for polyamides, polymercaptans, aliphatic polyamines, amidoamines and polyisocyanates
- Room and low temperature cure
- Low odor
- Light color
- Non-formaldehyde chemistry

Specified Key Data

Property	Value
Color, Gardner, max	3
Amine Value, mg KOH/g	465 - 510
Viscosity, Thermosel, at 25 °C, cP	150 - 400

Advanced Materials





Typical Properties

Property	Value
Amine Value, mg KOH/g	480
Viscosity at 25 °C, cP	300
Density lb/gal	8.0
Color, Gardner	1
Moisture (Karl Fisher)	0.1% (0.3% max)
Feezing Point, °C (°F)	10 (50)

Processing

Recommended mix ratio as a curing agent is 5 - 10 phr; as an accelerator is 1 - 5 phr. Due to chemical reaction, VERSAMID[®] EH-50 curing agent and epoxy resins should not be mixed until just prior to use.

VERSAMID® EH-50 Acceleration

Study Gel Time (200g mass), minutes

	Control	+5phr VERSAMID® EH-50	+5phr VERSAMID EH-30
VERSAMID® G151	81	66	56
VERSAMID® 140	108	84	66
VERSAMID® 115	178	125	144
VERSAMID® C30	38	25	30

Through Cure (6 mils DFT), hours

	Control	+5phr VERSAMID® EH-50	+5phr VERSAMID EH-30
VERSAMID® G151	10	6	6
VERSAMID® 140	8	5	5
VERSAMID® 115	5	4	5
VERSAMID® C30	6	3	3

VERSAMID® 690 CE / VERSAMID® EH-50 Water Immersion Weight Gain, %

	Control	+5phr VERSAMID® EH-50	+5phr VERSAMID EH-30
VERSAMID® G151	0.05	0.11	0.24
VERSAMID® 140	0.59	0.40	0.61
VERSAMID® 115	0.55	0.91	1.98
VERSAMID® C30	0.45	0.36	0.40

Advanced Materials

Technical Datasheet



Storage

VERSAMID® **EH-50** curing agent should be stored in a dry place, in its sealed original container, at temperatures between **2°C** to **40°C** (**35.6°F** to **104°F**). Under these storage conditions the shelf life is **12 months** from date of manufacture. 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

Advanced Materials Technical Datasheet



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 LLC, 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, if any.

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.

VERSAMID® is a trademark of Huntsman Corporation or an affiliate thereof in one or more, but not all countries.

© 2021 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