



ADCOTE™ 1217D Laminating Adhesive

Description

Adcote 1217D is a solution adhesive based on Mor-Ester™ 49002 polyester resin. It provides excellent adhesion to most plastic and metal surfaces, and can be used as a primer, heat seal coating, or adhesive. This product's performance can be further enhanced by using recommended coreactants.

Typical Properties (Not a Specification)*

Weight Solids	16-18%
Viscosity	19 Sec, #2 Zahn cup
Density	9.1 ± 0.2 lb/gallon
Solvent	1,3 dioxolane
Recommended Diluents	1,3 dioxolane, toluene
Coreactant	Coreactant F**
Mix Ratio	100 pbw Adcote 1217D 2 pbw Coreactant F
Shelf Life	360 days (unopened containers)

*These items are provided for general information only. They are approximate values and not considered part of a product specification.

**Other coreactants are available for special uses. Consult your Rohm and Haas sales representative for further information.

Precautions

See Material Safety Data Sheets for hazardous ingredients, flammability, disposal, and related handling information. Alcohol and similar materials containing active hydrogen can react with Adcote 1217D resin, causing inadequate cure. Adcote 1217D resin can react or interact with other components of the structure. Retained solvents, slip additives, anti-block agents, and contaminated solvents are some of the components that may cause property changes in substrates and/or Adcote 1217D resin.

General Information

The initial color and clarity of Adcote 1217D resin will remain unchanged after outdoor exposure. In addition, Adcote 1217D resin is resistant to dilute acid and alkali solutions. When Adcote 1217D is mixed with coreactant, its tensile strength and resistance to chemical plasticizers, solvents, and water are noticeably improved and its melting range increases. Also, with some substrates, the addition of a coreactant may improve adhesion.

High molecular weight polyesters that are used in solution adhesives like Adcote 1217D have tendency to form a reversible structure in solution with time. This structuring is accelerated when the adhesive is exposed to temperatures below 50°F. The structuring is reversible if heat and shear is applied to the adhesive. We recommend placing the container of adhesive in a steam cabinet, allowing venting of the container and heating to 110-140°F. After the adhesive reaches the proper temperature, mix the adhesive in the container for 1-3 hours under moderate shear. Use of a disperser or "Cowles" type blade will shorten the time needed.

Caution must be taken because of the flammability of the solvents used in the adhesive. Please review MSDS for hazards associated with the adhesive.

Attempting to redisperse without heat may reduce the apparent viscosity, but not result in a homogeneous mix. Before using the adhesive, check, to make sure that all resin has returned to a true solution and no gels remain.

Directions For Use

Note: Due to the aggressive nature of the solvents in the product, it is recommended that all rubber rolls in the coating head be EPDM or a suitable rubber to resist solvent attack.

Apply Adcote 1217D resin using any of the conventional methods, including gravure coater, reverse roll coater, knife and spraying. Dilution may be necessary. Apply enough wet coating to deposit 0.1-0.3 dry mils (or approximately 2-6 dry lbs/3000 sq ft) and completely remove the solvents. Laminate with heated nip rolls to provide a minimum glue line temperature of 310°F.

The preferred method for bonding is to:

1. Coat the more stable substrate.
2. Heat so that the glue line is 310°F.
3. Laminate.

A heated press can be used for general purpose bonding by employing enough pressure to ensure intimate contact between the adhesive and both surfaces, and holding this pressure until the glue line reaches 310°F.

When using Coreactant F, use the amount shown in the Typical Properties section as a guide. The optimum level of coreactant should be determined experimentally for each particular end use. Coating with coreactant is handled in the same manner as coating without coreactant. Curing begins after solvent removal and continues slowly at room temperature. Approximately 7-14 days are needed to complete the cure at room temperature, but a post cure at elevated temperatures can reduce this time.

Pot Life

Do not mix more Adcote 1217D resin and coreactant than will be needed in 8 hours. Any mixed solution that is left over should be stored in tightly closed containers and used within 3 days. When reusing, we recommend combining the old mixed solution with the newly mixed solution at a ratio of 25% old/75% new. Mix thoroughly.

Safety Precautions

Adcote 1217D resin contains somewhat toxic and/or flammable solvents, and suitable handling precautions should be observed. Do not inhale the fumes. Avoid prolonged and repeated skin contact. Eye contact must be prevented. Wear synthetic gloves, face shields, and aprons impermeable to these solvents whenever there is a possibility of skin contact. Use NIOSH approved respirators to avoid fumes.

Adcote and Mor-Ester are registered trademarks of Rohm and Haas Company.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and method of use of our products are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.

Suggestions for uses of our products or the inclusion of descriptive material from patents and the citation of specific patents in this publication should not be understood as recommending the use of our products in violation of any patent or as permission or license to use any patents of the Rohm and Haas Company.

Visit us at <http://www.rohmhaas.com/AdhesivesSealants>

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Rohm and Haas Food and Drug Opinion

Product Name: ADCOTE(TM) 1217D

Regulation Number	Complies	Limitations	Opinion Date
21CFR175.105	L	1	Dec 13,2001
21CFR175.320	L	1, 2	Dec 13,2001
21CFR177.1390	L	1	Dec 13,2001
Paragraphs (c)(2)(v)(a) and (c)(2)(vi)(a)(2)			
21CFR177.1395	L	1	
21CFR177.1630	L	1	
Paragraph (e)(4)(i)			

Legend:

L Yes, this product is cleared with limitations as noted.

Limitations:

1 SOLVENT MUST BE COMPLETELY EVAPORATED DURING DRYING AND CURING.

2 ONLY IN COATINGS THAT CONTACT FOOD ONLY OF THE TYPE IDENTIFIED IN PARAGRAPH 176.170(C), TABLE 1, UNDER CATEGORY VIII, AND UNDER CONDITIONS OF USE E,F, OR G, DESCRIBED IN TABLE 2 OF PARAGRAPH 176.170(C).

Regulations:

21CFR175.105 ADHESIVES

21CFR175.320 RESINOUS AND POLYMERIC COATINGS FOR POLYOLEFIN FILMS

21CFR177.1390 LAMINATE STRUCTURES FOR USE AT TEMPERATURES OF 250F AND ABOVE

21CFR177.1395 LAMINATE STRUCTURES FOR USE AT TEMPERATURES BETWEEN 120F AND 250F

21CFR177.1630 POLYETHYLENE PHTHALATE POLYMERS

Disclaimer:

This information relates specifically to this product. We believe this information to be accurate and reliable as of this date.

We recommend that our customers make their own determination on the suitability of this product for their particular application.

We cannot guarantee that the indirect food additives/food-contact status of this product will remain unchanged indefinitely; therefore we recommend that you periodically verify its status.

Rohm and Haas Food and Drug Opinion

Name: COREACTANT (TM) F

Regulation	Complies	Opinion Date	Limitations
21CFR175.105	Y	02/29/2008	

Legend:

- L Yes, this product is cleared with limitations noted
- N No, this product is not cleared
- Y Yes, this product is cleared.
- A Affirmed as compliant based on migration studies.

Regulations:

21CFR175.105 Adhesives

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