

## ADHESIVES AND SEALANTS

## ADCOTE™ 527 Laminating Adhesive

#### **Description and Features**

Adcote 527 adhesive is an isocyanate terminated polyester urethane adhesive. Adcote 527 adhesive is used as a single component, which requires moisture to cure and is used with various hydroxyl terminated coreactants. This polyester urethane alone, or in conjunction with various coreactants, functions as an adhesive for medical packaging, food packaging, and industrial laminations.

Adcote 527 adhesive adheres to a wide variety of substrates including polyvinyl chloride (PVC), treated polyolefins, polyester, polyamide, aluminum foil, metallized substrates, copper, steel and paper.

Adcote 527 adhesive provides optical clarity, high bond strength, and a high level of heat and chemical resistance.

The cure rate of laminations made with Adcote 527 adhesive is dependent on the temperature and relative humidity of the storage or holding area.

### **Typical Properties\***

Solids 65%

Viscosity 4000 cps @ 25°C

Weight/Gallon 8.7 lbs

Solvents Ethyl acetate

Diluents Methyl ethyl ketone, toluene, urethane grade ethyl acetate, or 1,1,1-trichloroethane

Coreactant 9L1 or Coreactant 9L2 (optional)
Mix Ratio

Coreactant 9L1 or Coreactant 9L2 (optional)
100 pbw Adcote 527/6.5 pbw Coreactant 9L1;

Coreactant 9L1 gives fast cure without dependence on moisture.

100 pbw Adcote 527/5 pbw Coreactant 9L2;

Coreactant 9L2 gives maximum heat resistance and adhesion to metallic substrates.

Shelf Life 360 days

### **Typical Uses**

The principal uses for Adcote 527 adhesive are in electrical shielding tape, polyvinyl chloride film laminations to film and metallic substrates, polyester film and metallized substrate laminations to metal foils, and transparent laminations for gas sterilized medical packages.

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

### Safety, Handling and Storage

- Store in cool, dry, well ventilated area away from heat and ignition sources. Keep container tightly
- Hot organic chemical vapors can suddenly and without warning combust when mixed with air. Ignition can occur at typical elevated temperature process conditions. Please evaluate such processes to assure safe handling conditions.
- Support and ground containers before opening, dispensing, mixing, pouring or emptying. Open with non-sparking tools. If container is warm, open bung slowly to release the internal pressure.
- Wash thoroughly after handling. Wash contaminated goggles, face shield, and gloves. Professionally launder contaminated clothing before re-use.
- ATTENTION! Container can be hazardous when empty. Follow label warnings even after container is empty. Do not use heat, sparks, open flames, torches or cigarettes on or near empty containers. Do not reuse empty container without professional cleaning.
- Refer to Material Safety Data Sheet for more information.

Alcohols and similar materials containing active hydrogen can react with Adcote 527 adhesive causing inadequate cure.

Adcote 527 can react or interact with other components of laminations. Retained solvents, slip additives, antiblock agents, and contaminated solvents are some of the components that may cause property changes of the film and/or adhesive. Under certain conditions, Adcote 527 adhesive can contribute to the problem of loss of sealability in finished laminations.

### **Recommended Operating Conditions**

Application Method	Direct gravure
Application Cylinder	110-150 line
Application Solids	25-35%

Dry Adhesive Weight 1.5-3.0 lbs/ream **Drying Web Temperature** 150°-180°F Laminating Temperature 150°-220°F

Cure Time 7-10 days at 70°F Slitting/Rewinding Time 24-48 hours at 70°F Cleaning Solvent Methyl ethyl ketone

#### Dilution Table for 100 lb Mix

% Solids	Adcote 527	Thinner
35	53.8 lbs	46.2 lbs
30	46.2 lbs	53.8 lbs
25	38.5 lbs	61.5 lbs

% Solids	Adcote 527	Coreactant 9L1	Thinner
35	53.3 lbs	3.5 lbs	43.2 lbs
30	45.7 lbs	3.0 lbs	51.3 lbs
25	38.1 lbs	2.5 lbs	59.4 lbs

Adcote is a registered trademark 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 <a href="http://www.rohmhaas.com/AdhesivesSealants">http://www.rohmhaas.com/AdhesivesSealants</a> Rohm and Haas Company, Midwest Technical Center, 2531 Technology Drive, Suite 301, Elgin, IL 60123

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# **Rohm and Haas Food and Drug Opinion**

Product Name: ADCOTE(TM) 527

Regulation Number	r Complies	Limitations	Opinion Date
21CFR175.105	L	1	Mar 01, 2000
Legend:			
L	Yes, this product	is cleared with limitati	ons as noted.
Limitations: 1	SOLVENT MUST BE COMPLETELY EVAPORATED DURING DRYING AND CURING.		
Regulations: 21CFR175.105	ADHESIVES		
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**

Product Name: COREACTANT 9L1

Regulation Number	Complies	Limitations	Opinion Date
21CFR175.105	L	1	May 12, 2000
Legend:			
L	Yes, this product is cleared with limitations as noted.		
Limitations:	SOLVENT MUST BE COMPLETELY EVAPORATED DURING DRYING AND CURING.		
Regulations: 21CFR175.105	ADHESIVES		
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**

Product Name: COREACTANT 9L2

Regulation Number	Complies	Limitations	Opinion Date
21CFR175.105	L	1, 2	Aug 02, 2000
Legend:			
L Yes, this product is cleared with limitations as noted.			
Limitations:			
1	SOLVENT MUST BE COMPLETELY EVAPORATED DURING DRYING AND CURING.		
2	CANNOT EXCEED 6% BY WEIGHT OF THE TOTAL NONVOLATILE CONTENT OF THE CURED ADHESIVE		
Regulations: 21CFR175.105	ADHESIVES		
Disclaimer:			
	This information relates specifically to this product. We believe this information to be accurate and reliable as of this date.		
			nake their own determination on particular application.
	status of this pro		et food additives/food-contact nanged indefinitely; therefore we fy its status.