



ADHESIVES AND SEALANTS

MOR-FREE™ 272

Solventless Laminating Adhesive

Description

Mor-Free 272 is a solvent-free, 100% solids, single component, self-curing polyurethane laminating adhesive. It is used in flexible packaging constructions including metallized substrates.

Typical Properties*

Appearance	Clear, colorless to light straw
Solids	100%
Viscosity (Brookfield)	
at 90°C	800 cps
at 25°C	93,000 cps
Density	9.2 lbs/gal
Shelf Life**	360 days

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

**Store in tightly closed container in cool, dry place.

Mor-Free 272 may react or interact with other components of laminations. Retained volatiles (solvents or water), slip additives, antiblock agents and inks are some of the components that may cause property changes of the laminated structure. If Mor-Free 272 is used on high slip films (COF < 0.2) or with high slip LDPE/LDPE laminations, then the user must verify that potential film property changes due to the lamination process and materials, are acceptable for the end use performance requirements.

Typical Uses

Some typical constructions using Mor-Free 272 are:

- Polyester to aluminum foil or treated polyethylene
- Cast polypropylene to aluminum foil
- Treated polyethylene to aluminum foil
- Paper to aluminum foil

Other types of laminates are possible and should be tested.

Adhesive Application

Laminators must be equipped with a heated fountain and heated applicator rollers. Best adhesive application is obtained when the adhesive is heated to a typical temperature of 194°F (90°C).

The optimum amount of coating weight necessary for good bonding varies with the end use requirements. It is suggested that initial evaluation be carried out at a range of 0.6-1.0 lbs/ream.

The adhesive containers need to be preheated in an oven to operating temperature before filling the applicator system. Do not heat the sealed containers any longer than 16 hours because the adhesive may become viscous and gel.

Combining

Best results are obtained at combining roll temperatures of 100-150°F. Film tension has to be controlled very carefully to eliminate tunneling or worming in the wind-up roller.

Bond Formation

This adhesive does not provide any green strength off the laminator. Bond develops in tightly wound rolls in 6-18 hours at room temperature storage. Optimum properties are obtained in 5-7 days.

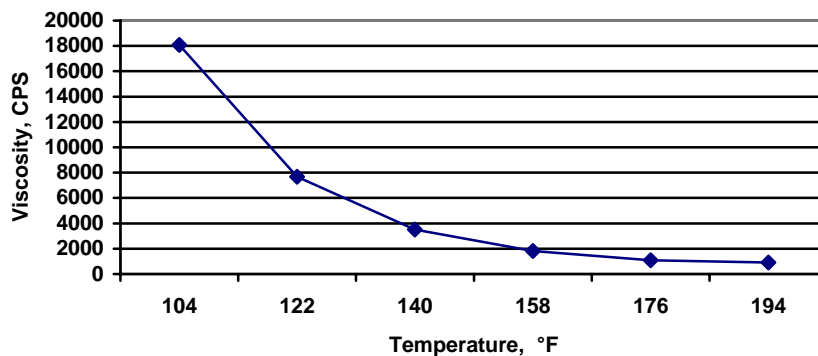
Clean-Up

Applicator rolls can be cleaned with isopropyl or ethyl alcohol. If the adhesive has cured on the applicator rolls, MEK is recommended for cleaning.

Safety, Handling and Storage

- Store in cool, dry, well ventilated area away from heat and ignition sources. Keep container tightly closed.
- Follow good manufacturing and handling practices.
- 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 reuse empty container without professional cleaning.
- Refer to Material Safety Data Sheet for more information.

Temperature vs. Viscosity Curve
Mor-Free 272



Mor-Free 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 <http://www.rohmhaas.com/AdhesivesSealants>

Rohm and Haas Company, Midwest Technical Center, 2531 Technology Drive, Suite 301, Elgin, IL 60123
Phone: 847-649-3800 Fax: 847-649-3760

Rohm and Haas Food and Drug Opinion

Product Name: MOR-FREE 272

Regulation Number	Complies	Limitations	Opinion Date
21CFR175.105	Y		May 12, 2000

Legend:

Y Yes, this product is cleared.

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.
