



### MOR-FREE™ 698A+C 79

#### Description

MOR-FREE 698A+C 79 is a solventless two-component polyurethane adhesive system processed at 40-45°C.

#### Application

MOR-FREE 698A+C 79 is especially suitable for the lamination of metallized films and alu foil, as well as printed and non-printed films such as PE (including EVA types), BOPP, PVdC and Acrylic coated films, PP, PETP, and PA. This adhesive was especially developed for the lamination at high machine speeds (>250m. per minute).

In non-metallized transparent laminates (without alu foil), the adhesive is suitable for thermal processes such as pasteurization and boiling. In addition, it is possible to make foil constructions for packaging of dry products which are not chemically aggressive.

An inter-reaction between the adhesive and other constituents of the laminated structures such as printing inks, films, additives, coatings, as well as with the packed product, may occur. Beside the desired effects, these inter-reactions may also lead to unforeseeable changes in quality.

As with all MDI-monomer containing adhesives, under especially unfavorable circumstances, particularly in:

- all laminates containing PA film, in particular PA/high EVA content PE, white pigmented or combination of both;
- sealing films containing excess amount of slip modifiers;
- and sealing films containing antifogging or antistatic additives,

there is a potential risk of monomer migration, which can interfere with sealing properties.

Therefore, before regular production, the suitability of the adhesive for the structures to be produced and the intended applications must be proven by preliminary testing.

#### Typical Properties

These properties are typical but do not constitute specifications.

	MOR-FREE 698A NCO-component	MOR-FREE C79 OH-component
Solids content (%)	100	100
Viscosity (mPa.s at 25°C)	7850 ± 1650	550 ± 150
Density (g/cm <sup>3</sup> )	1.16	0.99
Mix ratio standard by weight	100	50
Appearance	Liquid, clear, yellow to amber	Liquid, colorless to yellow

#### Food Legislation

Due to the evolving nature of European and local food legislations, please contact our Technical Service for food contact status.

## **Safety Information**

Material Safety Data Sheets (MSDS) are available for all Dow products. These sheets contain important information that you may need to protect your employees and customers against any known health and safety hazards associated with our products. We recommend that you obtain copies of our MSDS from your local Dow technical representative before using our products in your facilities. We also suggest that you contact your suppliers of other materials recommended for use with our products for appropriate health and safety precautions before using them.

## **Processing**

MOR-FREE 698A+C 79 is to be used with a laminating machine designed for solventless lamination, equipped with a suitable adhesive application unit and a tension control system suitable for winding laminated films with low initial tack.

MOR-FREE 698A+C 79 is characterized by a very high reactivity, which allows the slitting of the rolls 24 hours after lamination. The curing process is normally completed 10 days after lamination and may be influenced by the type of film used and by the storage conditions; it is necessary to wait until complete curing has taken place before using the laminate.

For trial runs, we recommend to prepare no more adhesive than can be used within 15-30 minutes.

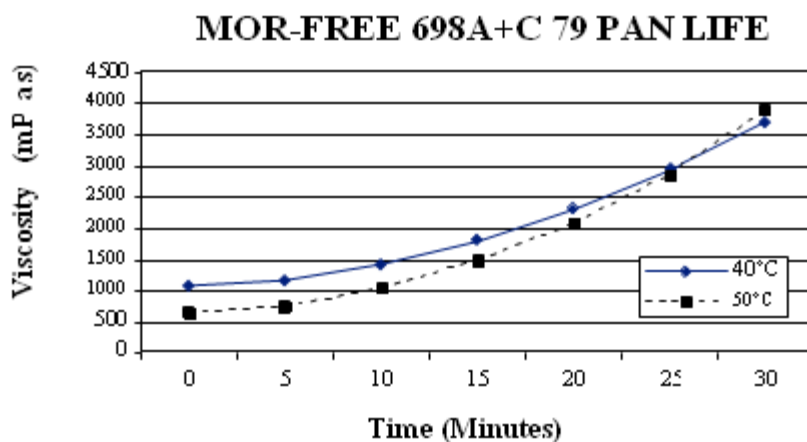
The mixing of the two components must be done in such way as to obtain an homogeneous mix. For regular production, it is indispensable to use a mixing and dosing device, which continuously mixes the adhesive in the chosen mix ratio, controls the feeding to the application unit, and stops automatically in case of machine standstills.

## **Storage and Shelf Life**

The expiry date of MOR-FREE 698A and MOR-FREE C 79 has to be considered the one reported on the label of the package. This data is valid if the product is stored in a dry and cool place (5-25°C) in closed original containers.

Once opened, drums, especially of the NCO-component, have to be used up within one day.

## MOR-FREE 698A+C 79 PAN LIFE



MOR-FREE is a trademark of The Dow Chemical 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 methods 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 Dow Chemical Company.



®™ Trademark of The Dow Chemical Company ("Dow")  
or an affiliated company of Dow

May 2008