

**POLYCO™ 4160****Regional Product Availability**

- Global

Description**Polyvinyl Acetate Homopolymer for Paper and Paperboard Coatings**

Carboxylated Polyvinyl Acetate Homopolymer with excellent mechanical stability and very low grit levels. Fine particle size with excellent pigment binding ability and water resistance. POLYCO™ 4160 provides excellent ink receptivity, glueability and brightness with very low odor. Recommended for applications where superior stability and runnability are required. No alkyl ethoxylates were used in the manufacture of this product. POLYCO™ 4160 was designed to meet new food compliance requirements (listed below).

Typical Properties

These properties are typical but do not constitute specifications

Property	Typical Values
Ionic Nature	Anionic
Solids %:	50
pH as packed:	6.0-8.0
Brookfield viscosity, cP:	<200
Glass Transition Temperature (Tg °C)	+38
Density, 25 °C, lbs./US gallon	9.0
Specific Gravity	1.08



FDA STATUS

FDA Regulation	Complies	Limitations	Opinion Date
21CFR176.170 Components of paper and paperboard in contact with aqueous and fatty foods	Yes; with limitations as noted	Provided that the food contact surface of the paper and paperboard complies with the Extractives Limitations in 21CFR176.170 paragraph (C)	2/11/2014
21CFR176.180 Components of paper and paperboard in contact with dry food	Yes		2/11/2014

BfR STATUS

All components used in the manufacturing of POLYCO™ 4160 comply with the requirements of BfR-recommendation XIV-A. For relevant limitations please refer to our most recent 10/2011/EC-status available for this product. Dispersions complying with BfR-recommendation XIV-A can be used in accordance with BfR-recommendation XXXVI (Paper and board for food contact) as sizing agents (chapter B.I.10.) and as surface refining and coating agents (chapter C.IV.1.). Some components are subject to a restriction. This proprietary information will be supplied upon your request following terms and conditions in agreement with the Company policies. Please contact our Customer Information Group (CIG@DOW.com) for more details.

CHINA GB-9685-2008 STATUS

The composition of POLYCO™ 4160 has been reviewed against China GB-9685-2008: The Hygienic Standards for Uses of Additives in Food Containers and Packaging Materials. All intentional components of POLYCO™ 4160 are listed in the GB9685-2008, or recent three positive lists:

1. The positive List of 107 Resin or Resin Categories for Using in Food Packaging Materials (The Ministry of Health Bulletin 2011, No. 23)
2. The positive list of 301 kinds food packaging additives (The Ministry of Health Bulletin 2012, No. 5)
3. The positive list of 258 kinds food packaging additives (2013, No. 5)

Handling Precautions

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

Storage

Store products in tightly closed original containers at temperatures recommended on the product label.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Coating Materials Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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