



PARALOID™ BTA SERIES MBS Impact Modifiers for PVC Film and Sheet

Product Description

PARALOID™ BTA Series impact modifiers are applicable for film/sheet applications, especially:

- PARALOID BTA-707 is for low crease-whitening film/sheet applications, e.g. display boxes
- PARALOID BTA-717 is for general purpose transparency film/sheet applications
- PARALOID BTA-730 is for high impact transparent film/sheet applications
- PARALOID BTA-751 is for opaque/translucent film/sheet applications, e.g. Christmas tree leaves

PARALOID BTA Series provide the following advantages over competitive products:

- Spheroid-powder characteristics allow a free flowing powder and dust-free mixing
- Faster fusion contributes to higher-output production
- Higher impact efficiency allows dosage of MBS and gives cost-savings in formulation
- An optimum combination of clarity and impact strength gives excellent quality, to appeal to consumers

All of PARALOID BTA Series impact modifiers are based upon proven DOW Chemical Company MBS technology. These are manufactured at The Dow Chemical Company Singapore plant to cater to the growing demand in the Asia-Pacific region.

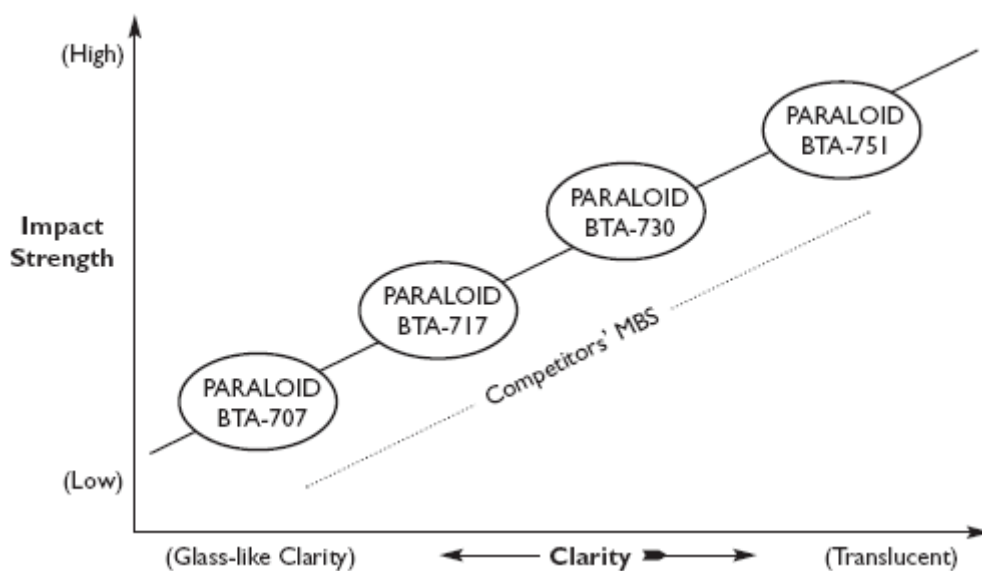
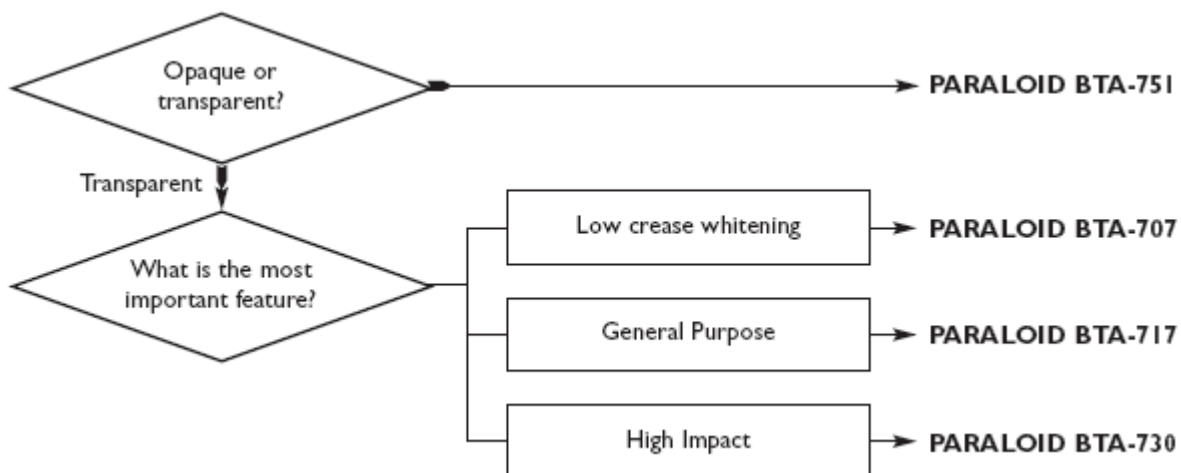
The PARALOID BTA Series production process has obtained ISO9002 quality assurance certification.

Typical Physical Properties

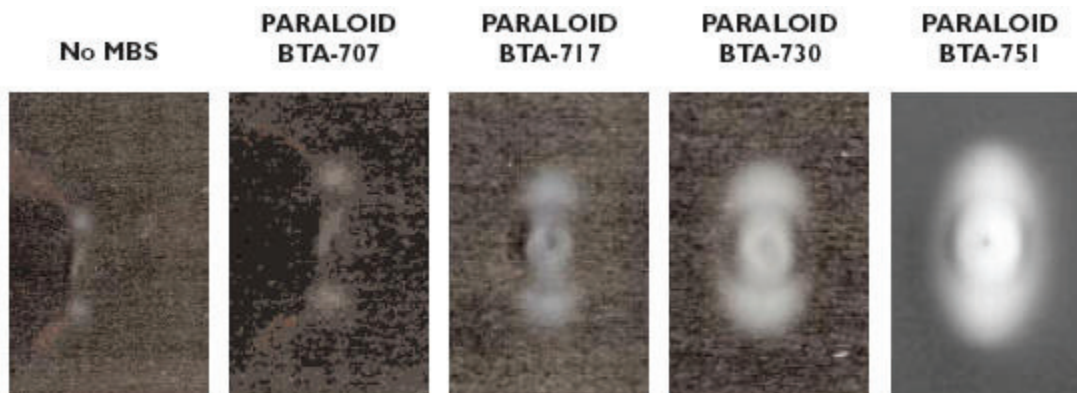
These properties are typical but do not constitute specifications.

NO.	ANALYSIS ITEM	PARALOID BTA-707		PARALOID BTA-717		PARALOID BTA-730		PARALOID BTA-751	
		UNIT	VALUE	UNIT	VALUE	UNIT	VALUE	UNIT	VALUE
1	APPEARANCE		White Powder		White Powder		White Powder		White Powder
2	VOLATILE MATTER	Wt. %	< 1.0	Wt. %	< 1.0	Wt. %	< 1.0	Wt. %	< 1.0
3	BULK DENSITY	g/ml	0.42±0.05	g/ml	0.42±0.05	g/ml	0.42±0.05	g/ml	0.42±0.05
4	PART. SIZE DIST. ON MESH 20 PASS MESH 325	Wt. %	< 1.5	Wt. %	< 1.5	Wt. %	< 1.5	Wt. %	< 1.5
		Wt. %	< 5.0	Wt. %	< 5.0	Wt. %	< 5.0	Wt. %	< 5.0
5	IMPACT STRENGTH (IZOD)	Kg.cm/cm ²	> 60	Kg.cm/cm ²	> 60	Kg.cm/cm ²	> 80	Kg.cm/cm ²	> 70

Choice of PARALOID™ BTA Series Impact Modifiers



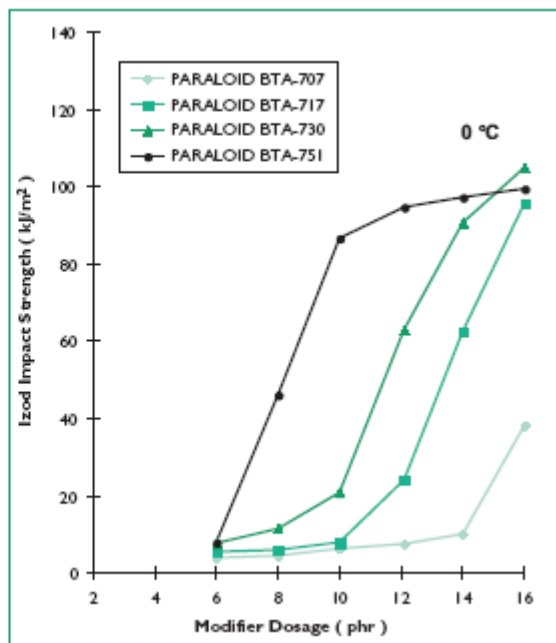
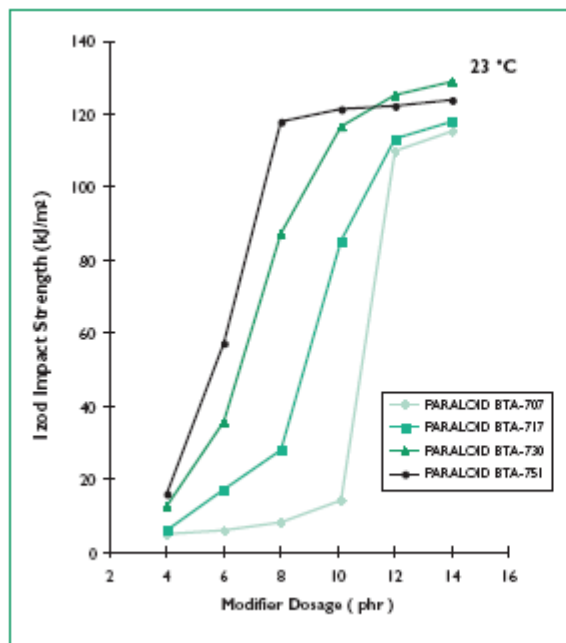
Crease Whitening



Dart drop test results. Every photo has the same zooming ratio. PARALOID BTA-707 shows the lowest crease whitening.

Izod Impact Strength

PARALOID™ BTA-751 impact modifier makes it possible to improve impact resistance at lower temperatures.



Experimental

Crease whitening and sheet impact

Formulation

sPVC K58 = 100 weight parts

ADVASTAB™ methyl tin stabilizer = 1.8

ADVALUBE™ glycerol mono oleate = 0.8

ADVAWAX™ ester wax (Tm 55°C) = 0.5

PARALOID K-175P = 0.5

PARALOID K-130P = 1.0

PARALOID BTA Series Impact Modifier = 0 or 6

Equipment

Two Roll Mill / Press molder

Dart drop tester

Punching impact tested

Izod Impact

Formulation

sPVC K58 = 100 weight parts

ADVASTAB methyl tin stabilizer = 1.8

ADVALUBE glycerol mono oleate = 0.8

ADVAWAX ester wax (Tm 55°C) = 0.5

PARALOID K-175P = 0.5

PARALOID K-130P = 1.0

PARALOID BTA Series Impact Modifier = As indicated

Equipment

Two Roll Mill / Press molder

Test Standard

ASTM D256, Thickness = 3.2mm, 0.25R V-notch

FDA Conformance

PARALOID™ BTA series additives conform with U.S. Food and Drug Administration (FDA) Regulation 21CFR178.3790 governing their use in semirigid and rigid PVC plastics for food packaging and food contact applications. The finished composition must meet the extractive limits stipulated by the regulation. The Dow Chemical Company recommends that the manufacturer consult with our technical service team about proper formulating procedure.

Safe Handling Recommendations

PARALOID™ plastics additives should be kept away from flames, hot pipes, heaters or other sources of heat. Adequate precautions should be taken to keep all dust levels below values that are hazardous to health and safety. In case of eye or skin contact, eyes should be flushed with water to remove dust particles and affected skin areas washed with soap and water.

Material Safety Data Sheets (MSDS)

Material Safety Data Sheets are available outlining hazards and safe handling methods. Contact The Dow Chemical Company for copies of the MSDS for this product and for other handling information.

The Dow Chemical Company is a raw materials supplier, not an end-use manufacturer of product. Development of a final formulation, testing, application, and ultimate performance of the end-use product is fully the responsibility of the formulator.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith but, as conditions and methods of use of our products are beyond our control, The Dow Chemical Company makes no warranties, either express or implied, concerning the final end-use product. The Dow Chemical Company expressly disclaims any implied warranty of fitness for a particular purpose. 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 product 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 The Dow Chemical Company.

PARALOID, PARALOID EXL, ADVASTAB, ADVAWAX, ADVALUBE, ADVAPAK, and ACRYLIGARD, are trademarks of The Dow Chemical Company or of its subsidiaries or affiliates.

Notice: No freedom from any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

