

# LOTADER® 4403

## Ethylene – Acrylic Ester - Maleic Anhydride terpolymer

### DESCRIPTION

LOTADER® 4403 is a random terpolymer of ethylene, acrylic ester and maleic anhydride, polymerized by high-pressure process.

### TYPICAL PROPERTIES

| Characteristics                          | Value | Unit              | Test Method            |
|--|-------|-------------------|------------------------|
| Acrylate content                         | 18    | % Wt              | FTIR (internal method) |
| Maleic Anhydride content                 | 0.3   | % Wt              | FTIR (internal method) |
| Melt Index (190°C / 2.16 kg)             | 8     | g/10min           | ISO 1133 / ASTM D1238  |
| Melting point                            | 77    | °C                | ISO 11357-3            |
| Density                                  | 0.94  | g/cm <sup>3</sup> | ISO 1183 / ASTM D1505  |
| Vicat softening point                    | 45    | °C                | ISO 306 / ASTM D1525   |
| Elongation at break <sup>(1)</sup>       | 750   | %                 | ASTM D 638 / ISO R 527 |
| Tensile strength at break <sup>(1)</sup> | 9     | MPa               | ASTM D 638 / ISO R 527 |
| Flexural modulus <sup>(1)</sup>          | 20    | MPa               | ASTM D 790 / ISO 178   |
| Hardness Shore D <sup>(1)</sup>          | 25    | -                 | ASTM D 2240            |

<sup>(1)</sup> On compression molded samples.

### APPLICATIONS

LOTADER® 4403 is a versatile adhesive resin for extrusion lamination/coating, not intended to be diluted.

LOTADER® 4403 provides excellent adhesion to various substrates in extrusion lamination process. It bonds to PE, paper, board, metallized films and corona treated PE, OPP, CPP and OPA films.

Typical applications:

- Adhesive for extrusion coating lamination: Film / Tie / Foil.
- Adhesive for extrusion coating of LDPE / Tie / PA / Tie onto paper or films.

For more detailed information and recommendations regarding your specific application, please contact your local ARKEMA technical representative.

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## PROCESSING

As a result of high-pressure polymerization in autoclave reactor, **LOTADER® 4403** molecular structure and rheology are remarkably suitable for all kinds of extrusion, including extrusion coating/lamination: low neck-in, excellent melt stability and drawability.

Standard polyolefin extrusion equipment can be used for **LOTADER® 4403**, which has the same processability as LDPE and the same heat stability given by acrylate comonomers. Recommended temperature range is from 270°C up to 320 – 330°C. It is recommended to purge the equipment with LDPE after a run is completed before shutting down.

## STORAGE, HANDLING AND SAFETY

**LOTADER® 4403** should be stored in standard conditions and protected from UV-light. Improper storage conditions may cause degradation and could have consequences on physical properties of the product.

Safety data sheet as well as information on handling and storage of the **LOTADER® 4403** are available upon request to your ARKEMA representative or on the web site [lotader.com](http://lotader.com).

## SHELF LIFE

Two years from the date of delivery, in unopened packaging. For any use above this limit, please refer to our technical services.

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