

# ThermoFlow® 636

## Product description:

ThermoFlow® chopped strands with 636 sizing are produced by chopping E-glass fibers coated with a silane based sizing. Johns Manville technology enables the product to achieve excellent bulk density and flow characteristics, which allows the fibers to be fed into the extruder with a very low generation of fuzz compared to standard chopped strand products.

ThermoFlow® chopped strands with 636 sizing provides exceptional strand integrity, clean feeding, and uniform fiber distribution when used in glass reinforced polypropylene requiring higher heat resistance.

## Resin compatibility:

- Polypropylene (PP)
- Polyvinyl Chloride (PVC)
- Polyethylene (PE)



**Designation:** Glass type is E-Glass

## Benefits:

- Excellent mechanical properties in PP DAM and good mechanical properties after aging in hot water
- Excellent white color performance in application for white appliances and detergent resistance
- 636 can be used as reinforcement for plastics in food contact applications (repeated use) in Europe (Please contact us for further details)
- Optimal strand integrity with effective fiber dispersion, which yields consistent mechanical properties
- Up to 50% improved flow vs. non-densified market grades, which yields reliable supply to the extruder resulting in more consistent properties
- Reduced fines content increases customer productivity due to less cleaning maintenance
- Improved bulk density increases net package weight translating to less storage and handling costs.



JM Designation	Region	Filament diameter (µm)	Sizing designation	Chopped strands length (mm)
ThermoFlow® 10 636 4 mm	EU	10	636	4
ThermoFlow® 13 636 4 mm	EU/NA	13	636	4

## Mechanical Properties:

Based on 13µm fiber diameter			PP Coupled	PP Uncoupled	PP Coupled after aging*
<b>Tensile</b> according to ISO 527-2	<b>Strength</b>	<b>MPa</b>	<b>70</b>	<b>45</b>	<b>62</b>
	<b>Modulus</b>	<b>GPa</b>	<b>6.1</b>	<b>5.0</b>	<b>5.6</b>
	<b>Elongation</b>	<b>%</b>	<b>4.2</b>	<b>1.9</b>	<b>3.2</b>
<b>Charpy</b> according to ISO 179-1/1eU and ISO 179-1/1eA @ 23°C	<b>Unnotched</b>	<b>kJ/m<sup>2</sup></b>	<b>63</b>	<b>20</b>	<b>35</b>
	<b>Notched</b>	<b>kJ/m<sup>2</sup></b>	<b>20</b>	<b>8</b>	<b>-</b>
<b>Glass content</b> according to ISO 3451-1		<b>%</b>	<b>30</b>	<b>30</b>	<b>30</b>

Note: the values shown above are typical properties provided only for guidelines purposes within JM product range. Actual values may vary due to processing conditions such as the resin used, compound composition, type and size of the extruder, type and conditions of the injection molding machine.

\* Aging 40 days in DEIO water at 95°C.

## Packaging:

Region	Packaging type	Pallet dimensions	Net weight per pallet	Bag per pallet
EU	Bulk Bag / Octabin	1140 x 1140 mm 1140 x 1140 x 1200 mm	1000 - 1150 kg	1
NA	Bulk Bag	45 x 45 inch	2200 Lbs	1

## Storage:

These products should be stored in original packaging in dry, roofed, dust free storehouses. The recommended temperature is between 10°C to 30°C (50°F to 86°F). The products should remain in the original packaging and be conditioned in the work area for a minimum of 24 hours prior to use. The pallets should be single stacked unless otherwise specified on the packaging unit.



Europe



North America

Warranty disclaimer :

## Values:

All data represent typical average values.

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of this product represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Check with the Regional Sales Office nearest you for the most current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on Johns Manville products, please visit <https://www.jm.com/en/login/policies-terms-and-conditions/> or call (800)654-3103.



### US Headquarters

Johns Manville  
717 17th Street  
Denver, CO 80202 - USA  
Phone: +1 (303) 978 2000

### Customer-Service-Offices:

#### North America

Johns Manville  
7500 Dutch Road  
Waterville, OH 43566 - USA  
Phone: +1 (800) 554 4826  
Fax: +1 (419) 878 1538

#### Europe

Johns Manville Slovakia, a.s.  
Strojárska 1  
91799 Trnava - Slovakia  
Phone: +421 (0) 33 5918 249

[www.jm.com](http://www.jm.com)  
[fibers@jm.com](mailto:fibers@jm.com)