



Product specification Expancel FG

	FG52 DU 80 ⁽ⁱ⁾	FG92 DU 120	FG92 MB 120
Particle size D80.5): (1)	16-24 μm	28-38 µm	
Thermomechanical Analysis (2)			
Tstart	94-105°C	122-132°C	
Tmax		194-206°C	
TMA-density		$\leq 14 \text{ (kg/m}^3\text{)}$	
Density at 140°C	≤ 25 (kg/m³)		
Residual substances			
Acrylonitrile	≤ 1 (mg/kg)	≤ 30 (mg/kg)	≤ 20 (mg/kg)
Methylmethacrylate	≤ 400 (mg/kg)		
Methacrylonitrile		≤ 100 (mg/kg)	≤ 65 (mg/kg)
Sodium 2-cyanoethanesulfonate	≤ 50 (mg/kg)	≤ 200 (mg/kg)	≤ 130 (mg/kg)
Sulfite	≤ 2000 (mg/kg	≤ 2000 (mg/kg)	≤ 1300 (mg/kg)
Vinylacetate			≤ 3500 (mg/kg)
2.6-Di-tert-butyl-p-cresol			≤ 260 (mg/kg)
Grade of Microsphere			FG92 DU 120
Concentration of MS (%)			65 ± 1
Carrier			EVA*
Height of foaming (3) (mm)			90-140 (200°C)
Bulk density (g/l)			400-500

Product information

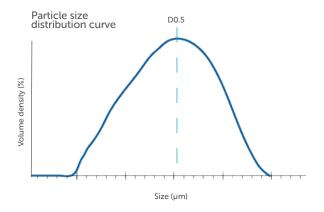
- Expancel DU = Dry powder of unexpanded Expancel Microspheres
- Expancel MB = Masterbatch of unexpanded Expancel Microspheres
- * EVA = Copolymer of ethylene vinylacetatekg.
- Use the product within three years after production date, if unopened.
- Not all grades available in all locations. Check local sales office for availability.
- (i) FG52 DU 80 is approved by FDA (The US Food and Drug Administration) for use in agglomerated cork.



References

- Thermomechanical Analysis: performed on a thermomechanical analyzer, measuring dimensional changes as a function of temperature.
 More information: "Thermomechanical analysis of Expancel".
- 2) Particle size: measured by laser diffraction; Low Angle Laser Light Scattering (LALLS). D(0.5) = average particle size.

 More information: "Particle size of Expancel".
- 3) Height of foaming: measurement of the height of foam, given by free expansion of Expancel MB. Performed in a conventional hot air oven.
 More information: "Analythical Method QMS-56".



To find out more about our microspheres, visit our website:

nouryon.com/products/expancel-microspheres

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