

Specification

Product Specification for Expancel microspheres

Issue 2014.12 (Replaces 2014.05)



Expancel food contact grades

	FG52 DU 80	FG92 DU 40	FG92 DU 120	FG92 MB 120
Particle size D(0.5): ⁽¹⁾	16–24 µm	10–16 µm	28–38 µm	

Thermomechanical Analysis: ⁽²⁾

Tstart	94–105°C	123–133°C	122–132°C	
Tmax		167–177°C	194–206°C	
TMA-densitet		≤ 17 [kg/m ³]	≤ 14 [kg/m ³]	
Density at 140°C	≤ 25 [kg/m ³]			

Residual substances:

Acrylonitrile	≤ 1 [mg/kg]	≤ 30 [mg/kg]	≤ 30 [mg/kg]	≤ 20 [mg/kg]
Methylmethacrylate	≤ 400 [mg/kg]			
Methacrylonitrile		≤ 100 [mg/kg]	≤ 100 [mg/kg]	≤ 65 [mg/kg]
Sodium 2-cyanoethanesulfonate	≤ 200 [mg/kg]	≤ 200 [mg/kg]	≤ 200 [mg/kg]	≤ 130 [mg/kg]
Sulfite	≤ 2000 [mg/kg]	≤ 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

Concentration of MS [%]				FG92 DU 120
Carrier				EVA *
Height of foaming ⁽³⁾ [mm]				90–140 (200°C)
Bulk density [g/l]				400–500

Expancel DU = Dry Unexpanded Expancel microspheres

Use the product within three years after production date, if unopened.

Expancel MB = Masterbatch with unexpanded Expancel microspheres

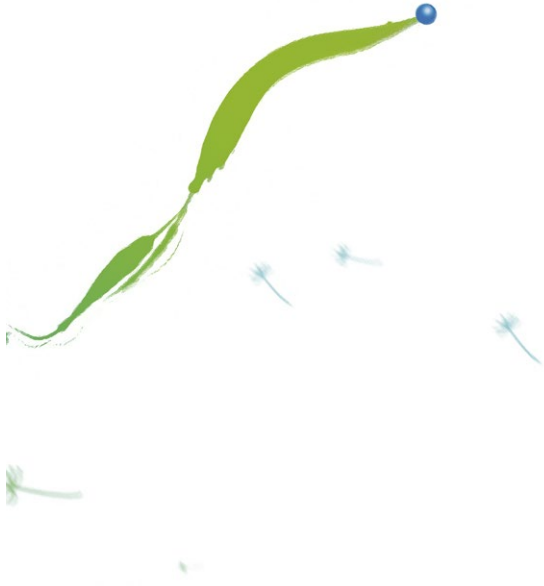
Not all grades available in all locations. Check local sales office for availability.

* EVA = Copolymer of ethylene vinylacetate

(1) "Particle size of Expancel MS"

(2) "Thermomechanical analysis of Expancel MS"

(3) "Analytical Method QMS-56"



For more information on our microspheres you can contact us at:

Email: info.expancel@akzonobel.com

Akzo Nobel Pulp and
Performance Chemicals AB
Expancel
Box 13000
SE-850 13 Sundsvall
Sweden
T +46-60 13 40 00
F +46-60 56 95 18



www.akzonobel.com
www.expancel.com

AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. We supply industries and consumers worldwide with innovative products and are passionate about developing sustainable answers for our customers. Our portfolio includes well-known brands such as Dulux, Sikkens, International and Eka. Headquartered in Amsterdam, the Netherlands, we are consistently ranked as one of the leaders in the area of sustainability. With operations in more than 80 countries, our 50,000 people around the world are committed to delivering leading products and technologies to meet the growing demands of our fast-changing world.

© 2014 Akzo Nobel NV. All rights reserved.

Expancel is a registered trademark of AkzoNobel in a number of territories.