

# Neusilin® US2

## Technical Data Sheet

www.neusilin.com

### Neusilin® - The Specialty Excipient

A synthetic magnesium aluminometasilicate (MAS) with exceptional excipient properties for improving actives delivery and quality of pharmaceutical preparations. Although chemically the same as traditional crystalline MAS, Neusilin® is both structurally and functionally a very different product that serves a multitude of purposes when compared to other silicates.

### Key Features

- Oil adsorption of poorly water soluble actives
- Improves tablet and powder capsule quality
- Compact tablets with relevant hardness
- Excellent carrier for solid dispersion

### General Properties

Chemical formula	Al <sub>2</sub> O <sub>3</sub> ·MgO·1.7SiO <sub>2</sub> ·xH <sub>2</sub> O	
General name	Magnesium Aluminometasilicate	
Appearance	White granule	
Form	Amorphous	
Solubility	Practically insoluble in water and ethanol	
Composition (%) on dried basis	Al <sub>2</sub> O <sub>3</sub> 29.1 - 35.5 MgO 11.4 - 14.0 SiO <sub>2</sub> 29.2 - 35.6	
Degree of whiteness	> 95	
Loss on drying 110°C/7hrs (%)	< 7	
Bulk density	Loose (g/ml)	0.13 - 0.18
	Tapped (g/ml)	0.16 - 0.22
True specific gravity	2.2	
Specific surface area (m <sup>2</sup> /g)	300	
Average particle size (µm)	106	
Angle of repose (°)	30	
Oil adsorbing capacity (ml/g)	2.7 - 3.4	
Water adsorbing capacity (ml/g)	2.4 - 3.1	
Acid consuming capacity (ml/g)	≥ 210	
Ph 4% slurry	6.0 - 8.0	

### Typical Application and Quantity Required

Application / function	Quantity (%)
Excipient / diluent	30 - 90
Tablet - binder, disintegration aid, increase hardness	1 - 10
Stabilization of deliquescent drugs	5 - 15
Solidification of liquid pharmaceutical preparations	30 - 50
Solid dispersion, SMEDDS	20 - 50

### Pharmacopoeia & Regulatory

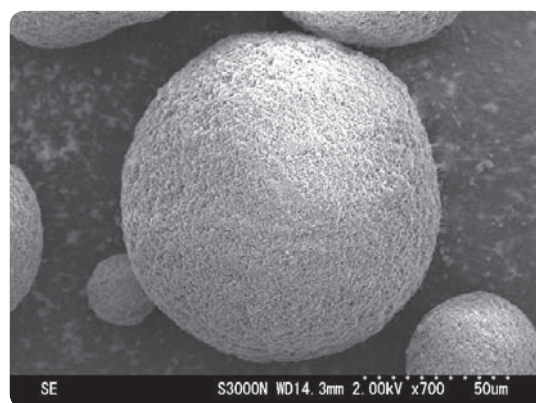
Neusilin® meets all requirements of the current USP/NF and JPC. US DMF Type IV filed in 1998.

### Handling & Storage

Packaging: 10 kg double-lined Kraft bags

Storage: Store at room temperature and avoid high humidity.

Shelf life: 3 years from the date of manufacture stored in recommended conditions.



Neusilin® US2 (×700)



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