



# PRODUCT SPECIFICATIONS

## AGM PN: 920013

SILICA GEL, TYPE A, ORANGE TO GREEN INDICATING, 2-5 MM BEADED

**Chemical Formula:**  $\text{SiO}_2 + n\text{H}_2\text{O} + \text{C}_{20}\text{H}_{14}\text{O}_4$

### Product Description:

Silica gel is the naturally occurring mineral silicon dioxide that has been purified and processed into a hard, smooth beaded form. The beads are then saturated with a moisture indicating solution that gives them an orange color when dry. It is also known as a narrow, or micro, pore silica gel and has a vast network of interconnecting pores with diameters of 20-30Å. These pores have a strong affinity for moisture and use physical adsorption and capillary condensation to trap and hold it. Silica gel will remove moisture at temperatures as high as 150°F, but it is best used at room temperature (70-90°F) and high relative humidity (60-90% RH).

The color changes from orange to green as it adsorbs moisture. The color typically begins to change as moisture content passes 6% by weight and is complete by 15% by weight. A bright green color indicates moisture saturation and that it is time to replace or regenerate the desiccant. This silica gel meets the needs of environmentally concerned companies and conforms to European Union requirements for moisture indicating desiccants.

Property	Value	Unit
Bead Size	2-5	mm
Nominal Pore Opening	20-30	Angstroms
Color Change	Orange to Green	Indication (@20%RH±6%@20°C)
pH (Slurry)	≈ 7	pH
Water Adsorption Capacity		
20%	≥ 11	% Weight
40%	≥ 22	% Weight
80%	≥ 33	% Weight
Bulk Density	≥ 700	g/l
	≥ 44	lbs/ft <sup>3</sup>
Size Qualification	≥ 97	%
Package Moisture	≤ 4.0	% Weight

### Typical Applications

As a primary desiccant or blended with other desiccants in any application where visual control of moisture is required, such as compressed air dryers, gas drying, breathers, for protection of non-consumable packaged goods, drying and storage of flowers and seeds, etc. Due to the addition of the moisture indicator, Indicating Silica Gel should not be used in contact with products intended for consumption, such as food or pharmaceuticals.

### Handling and Storage Recommendations

Store silica gel in a dry location to prevent premature water adsorption. Reseal packages after opening to prevent contamination and unintended water adsorption. We recommend that you rotate stock so oldest material is used first.

### Packaging Information

Bags 25 kg  
Drums Fill weights to order specification  
Super Sacks Fill weights to order specification