

PRODUCT SPECIFICATIONS

Silica Gel, Type A, Orange to Green Indicating, 3-5 mm Beaded

silica gel store 

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CHEMICAL FORMULA

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

PRODUCT DESCRIPTION

Silica gel (type A) is an amorphous and porous form of silicon dioxide (silica) that has been purified and processed into a hard, smooth beaded form. 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 70°C, but it is best used at room temperature (21-32°C) and high relative humidity (60-90% RH).

This silica gel contains a methyl violet dye that changes from orange to green as it adsorbs moisture. The colour change begins at 6% by weight and is complete by 20% by weight. A dark green colour indicates moisture saturation and replacement or regeneration of desiccant is required. This silica gel conforms to the European Union requirements for moisture indicating desiccants.

SPECIFICATIONS		
Property	Value	Unit
Water Adsorption Capacity		
RH = 20%	≥ 8	% weight
RH = 35%	≥ 14	% weight
RH = 50%	≥ 22	% weight
RH = 90%	≥ 30	% weight
Bead Size	3 – 5	mm
Indicating Dye	methyl violet	
Thermal Conductivity	0.63	KJ/m.Hr.°C
Wear Ratio	≤ 10	%
Size Qualification Ratio	≥ 96	%
LOI	≤ 5	%
Bulk Density	≥ 750	g/l
HUMIDITY INDICATING		
Colour Change	Orange to Green	
RH = 20%	Orange	
RH = 35%	Light Brown / Green	
RH = 90%	Dark Green	

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 & 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.

REGENERATION INSTRUCTIONS

Heat at a max of 105°C degrees for 4 hours.