

sSORB®

YELLOW (ORANGE) INDICATING SILICA GEL BEADS, TYPE A

PRODUCT DESCRIPTION

sSORB yellow (orange) indicating silica gel is a synthetically modified silicon dioxide that has been purified and processed into a hard, smooth bead. The beads are then saturated with a moisture indicating solution that gives them a yellow (orange) color when dry. It is also known as a narrow 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 220°F but is best used at room temperature (70-90 °F) and high relative humidity (60-90%Rh).

The color changes from yellow (orange) to green as it adsorbs moisture. The color typically begins to change as the moisture content passes 6% by weight and is complete at 14% by weight. A bright green color indicates moisture saturation and that it is time to replace or regenerate the desiccant.

CHEMICAL FORMULA

$SiO_2 \cdot nH_2O + C_{25}H_{30}N_3Cl$ or

$SiO_2 \cdot nH_2O + C_{20}H_{14}O_4$

TYPICAL APPLICATIONS

As 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 packed goods, drying and storage of flowers and seeds, etc. Due to the addition of the moisture indicator, sSORB yellow (orange) indicating silica gel should not be used in contact with products intended for consumption such as food or pharmaceuticals.

TYPICAL PROPERTIES

PRODUCT CODE		AY13B	AY25B
Particle Size (mm)		1-3	2-5
Particle Type		Bead	Bead
Type		A	A
Nominal Pore Opening (Å)		20 – 30	20-30
Water Adsorption Capacity (wt%)	20%	≥ 8	≥ 8
	40%	≥ 13	≥ 13
	80%	≥ 20	≥ 20
Bulk Density (g/l)		≥700	≥700
Bulk Density (lb/ft ³)		≥ 44	≥ 44
Size Qualification (%)		≥ 97	≥ 97
Package Moisture (wt%)		≤ 4	≤ 4

PACKAGING INFORMATION

sSORB yellow (orange) indicating silica gel is available in 55 kg poly bags, 450 kg super-sacks, and 900 kg super-sacks.

HANDLING & STORAGE RECOMMENDATIONS

Store sSORB 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.

HEALTH & SAFETY INFORMATION

Health and safety information is available on product SDS, which can be downloaded from our web site interraglobal.com or by contacting Interra Global at 847.292.8600.