

# BANSAL INSULATION & MICA HOUSE

---

## Technical Data Sheet: Silica Gel

**Material name:** Silica gel. Small porous, White standard  
**Brand name:** BIMH

**Description:** Glassy, hard, irregular shaped granules with a very high purity of approx. 99.5% SiO<sub>2</sub> (dry basis) and an internal surface area of approx. 800m<sup>2</sup>/g. Because of its very large surface area Silica gel exhibits a high adsorption for water vapour. Silica gel can be reactivated without significantly impairing the efficiency. It is therefore very economical, easy to dispose of and without any known adverse effects on the environment. Supplied as desiccant absorbent, silica gel conforms to US MIL-D-3464E, BS-2540, DIN 55473.

**Formula:** SiO<sub>2</sub>·n(H<sub>2</sub>O) – amorphous form of silica

**CAS-Nr.:** 7631-86-9

**Physical Characteristics:** Typical water vapour adsorption capacity at 25°C

at 20% relative humidity	≅	10.5%
at 50% relative humidity	≅	23.0%
at 90% relative humidity	≅	34.0%
Loss on ignition (180°C)		max. 3.0%
Bulk density	≅	750g/l
PH value		4~8
Specific resistance	≅	3,000 Ω . cm

**Standard grain Size:** 0.5–1.0 mm, 1.0 – 2.0 mm, 1.0 – 3.0 mm, 2.0 – 3.0 mm, 2.0 – 4.0 mm  
other special grading on request.

**Applications:** Due to its extremely high adsorptive capacity Silica gel has a multitude of uses:  
Static adsorption (=removal of moisture and control of humidity in packaging and other enclosed spaces without induced air flow).  
Dynamic adsorption (=removal of water from a continuously flowing gas or liquid stream).  
The temperature at reactivation should not exceed 200 °C

**Packaging:** Packaged from 0.5 gram up to 1000 grams by paper or nonwoven; airtight in PE barriers and carton.

**Handling:** Silica gel desiccant must always be kept in airtight containers to avoid pre-adsorption with water vapour. Face masks should be used at continual exposure to extensive dusting.

**Notes:** Any details of application possibilities do not free the purchaser from the obligation of performing his own tests on the material supplied by the seller in order to determine their suitability for the intended processes and purposes. Application, use and processing of the material cannot be controlled by the seller and are thus the sole responsibility of the purchaser.

---