

Montmorillonite

Material name: Montmorillonite, Bentonite.

Brand name: Minipac, Wisepac®, Wisesorb®, Wisemini®, Wiseview, Wisycle

Material Description: Montmorillonite refers to a family of non-metallic clays primarily composed of hydrated sodium calcium aluminum silicate. It takes extra strong adsorption capacity and can absorb 8-15 times water of its own volume. Montmorillonite can be applied as desiccant absorbent for its low cost (much cheaper than silica), excellent adsorption (same performance as silica gel under low humidity), easy to regeneration and dispose freely (natural Mineral). As absorbent, Montmorillonite conforms to US MIL-D-3464E.

CAS-Nr.: 1302-78-9

Chemical Composition (On dry basis)	Na ₂ O: 0.10%	MgO: 5.91%	Al ₂ O ₃ : 18.77%
	SiO ₂ : 65.63%	K ₂ O: 0.11%	CaO: 3.19%
	TiO ₂ : 0.15%	MnO: 0.05%	Fe ₂ O ₃ : 0.14%
	CO ₂ : 0.20%		

Physical Characteristics:	Typical water vapour adsorption capacity at 25°C	
	at 20% relative humidity	≧ 12.0%
	at 40% relative humidity	≧ 19.2%
	at 80% relative humidity	≧ 25.1%
	Loss on ignition (170°C) (on dry basis)	max. 2%
	Bulk density	≧ 980
PH value	7.0±0.5	

Standard grain Size: 0.5–2mm, 2-4mm, other special gradings on request.

Applications: Due to its extremely high adsorptive capacity Montmorillonite 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).

Regeneration Condition: **120°C, 24 hours**

Packaging: Packaged from 0.5 gram up to 500 grams by paper or nonwoven; airtight in PE barriers and carton.

Handling: Montmorillonite 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.