AQUA MANDIX

TECHNICAL DATA SHEET | Natural manganese dioxide filter media

Product overview

AQUA MANDIX is a natural, crushed manganese dioxide filtration medium used for catalytic removal of dissolved iron and manganese from water. It can be effective at pH 6.5 and in the presence of ammonium (NH4+). The manufacturer also reports partial removal of arsenic, aluminium and hydrogen sulfide when these occur together with iron and manganese.

Applications and key features

Catalytic iron and manganese removal; can impart catalytic activity to surrounding sand grains; does not require potassium permanganate (KMnO4) regeneration. Filter configuration and treatment performance depend on the raw water analysis and system design.

Chemical composition — typical values

Parameter	Specification
Manganese dioxide (MnO_2)	78 mass %
Iron(III) oxide (Fe_2O_3)	6.2 mass %
Silicon dioxide (SiO_2)	5.2 mass %
Aluminium oxide (Al_2O_3)	3.1 mg/kg (as published by supplier)

Physical characteristics

Parameter	Specification
Particle density	3.5 g/cm³
Bulk density	2,000 kg/m³ (approx. 2.0 kg/L)
Particle shape	Irregular
Colour	Dark brown to black
Available particle size	0.5–1.0 mm

Packaging / WATEX sales unit

Parameter	Specification
Product code	AQMX
Bag weight	25 kg
Nominal bag volume	12.5 L

Technical values are typical supplier figures, not guaranteed batch-specific limits. No service flow rate, backwash rate or operating pressure is specified in the referenced supplier product page; these must be determined for the particular filter design.
Sources: Aqua-Techniek — AQUA MANDIX product information; WATEX product listing (AQMX).