

DIN EN 12911:2013-07 (E)

Products used for treatment of water intended for human consumption - Manganese greensand

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions and symbols	6
4	Description	6
4.1	Identification	6
4.1.1	Chemical name(s)	6
4.1.2	Synonym or common names	6
4.1.3	Chemical formula	6
4.1.4	CAS Registry Number	7
4.1.5	EINECS reference	7
4.2	Commercial form	7
5	Physical properties	7
5.1	Appearance	7
5.2	Particle size distribution	7
5.3	Density (bulk density loose)	8
6	Chemical properties	8
7	Specific properties	8
8	Test methods	8
8.1	Sampling	8
8.2	Analysis	9
8.2.1	Particle size distribution	9
8.2.2	Bulk density loose	9
8.2.3	Mass loss at 150 °C	9
8.2.4	Ignition loss at 650 °C	9
8.2.5	Manganese content	10
8.2.6	Oxidation capacity	11
9	Labelling, transportation and storage	13
9.1	Means of delivery	13
9.2	Labelling according to the EU legislation	13
9.3	Transportation regulations and labelling	13
9.4	Marking	13
9.5	Storage	13
9.5.1	Long-term stability	13
9.5.2	Storage incompatibility	13
Annex A (informative)	General information on manganese greensand	14
A.1	Origin	14
A.1.1	Raw material	14

A.1.2	Manufacturing process	14
A.2	Typical properties	14
A.2.1	Chemical composition	14
A.2.2	Mechanical strength	15
A.2.3	Density	15
A.2.4	Porosity of particles	15
A.3	Use	16
A.3.1	Function	16
A.3.2	Specific amount	16
A.3.3	Means of application	16
A.3.4	Secondary effects	16
A.4	Hydraulic characteristics	16
A.4.1	Interstitial volume	16
A.4.2	Head loss in filtration	16
A.4.3	Expansion during up-flow washing	17
A.5	Rules for safe handling and use	17
A.6	Emergency procedures	17
A.6.1	First aid	17
A.6.2	Spillage	17
A.6.3	Fire	17
	Bibliography	18