

MPA NRW [Coat of arms]

Materialprüfungsamt [Department for Material Testing] North Rhine-Westphalia

TEST CERTIFICATE No. 22 000 871 00

Ordering party

Green Stuff
Absorbent Products GmbH
Robert-Bosch-Straße 2

Date of order: 06.09.2000
Samples received on: 11.09.2000

67269 Grünstadt

Order

Testing the oil bonding agent „Elephant Sorb Special“ according to the requirements for oil bonding agents, amended version, date of issue 28 February 1990 – announcements of BMU [Minister for the Environment] dated 12.03.1990 and 23.04.1998.

Specification of sample

Oil bonding agent on the basis of sodium aluminosilicate (pumice)

Name:

“Elephant Sorb Special”

1. Test specifications

Requirements for oil bonding agents, amended version, date of issue 28.02.1990 – test including item 4.8 of the requirements – suitability for traffic areas

This test certificate is valid until and including 02.11.2006.

The results of the tests exclusively refer to above mentioned test items. Test certificates can only be published or copied in unchanged form and contents without the approval of MPA NRW. The issuance of a summary of a test certificate is subject to the approval of MPA NRW.

This test certificate is made up of three pages.

2. Summary of results

The oil bonding agent "Elephant Sorb Special" complies with the requirements for oil bonding agents type III R.

2.1 General information

2.1.1 Concerning the question of the safety of application of the oil bonding agent in regards to industrial medicine and environmental technology in the event of accidents in connection with mineral oil (section 2.1.5.1 of the requirements), an expert's opinion from both the field of industrial medicine and environmental technology of the Hygiene-Institute of the Ruhr area in Gelsenkirchen dated 27.10.2000 has been submitted.
No restrictions

2.1.2 Regarding the warranty of the general requirements pursuant to section 2.1.1 b, c, d and the storing properties pursuant to section 2.1.6 of the requirements for oil bonding agents, appropriate indemnity bonds of the manufacturer dated 19.09.2000 have been submitted.

2.2 Bulk weight (pursuant to section 4.3) 320 g/l

2.3 Ratio of oil bonding agent (pursuant to section 4.5)

114 g oil bonding agent for	100 g	of oil
286 ml oil bonding agent for	100 ml	of oil
1 l oil bonding agent for	0.35 l	of oil

The calculation of the oil bonding agent's ratio had to be corrected pursuant to section 4.7 of the requirements.

Criteria of classification for oil bonding agents type III

Oil bonding agent requirement :	max. 350 vol.-%
Calculated value :	286 vol.-%

Oil bonding agent requirement without taking into account the additional requirement due to pressure load.

1 l oil bonding agent for	0.40 l of oil
---------------------------	---------------

2.4 Floatability (pursuant to section 4.6)

Pursuant to section 4.6 there is no test required for oil bonding agents of type III.

2.5 Durability of oil (pursuant to section 4.7)

After a load period of 2 hours no more oil was released. During the load period test, the additional requirement of oil bonding agent was 14 w/w per cent.

2.6 Particle-size distribution (pursuant to section 4.8)

> 4 mm	0	w/w per cent
4 – 0.5 mm	98.1	w/w per cent
0.5 – 0.125 mm	1.1	w/w per cent
< 0.125 mm	0.8	w/w per cent

Admissible plus material (> 4mm): 10 w/w per cent

Calculated value : 0 w/w per cent

2.7 Suitability for traffic areas (pursuant to section 4.9)

According to the test result, the SRT-value changed by 0 units resp. 0 %.

Maximum admissible change of SRT-value: 20 %

Calculated value: 0 %

3. Total evaluation

The tested oil bonding agent "Elephant Sorb Special" complies with the requirements for oil bonding agents of the Minister for Environment, Environmental Protection and Reactor Safety dated 12 March 1990 and 23 April 1998, for type III R.

This test certificate is valid until and including 02.11.2006. This validity can be extended according to no. 6 of the guideline.

Dortmund, 03.11.2000
O/o

Dipl.-Ing. [Certified engineer] Meermann
Head of Subject Area
