

MPA NRW [Coat of arms]

Materialprüfungsamt [Department for Material Testing] North Rhine-Westphalia

TEST CERTIFICATE No. 22 000 968 00

Ordering party

Green Stuff
Absorbent Products GmbH
Robert-Bosch-Straße 2

Date of order: 07.08.2000
Samples received on: 15.09.2000 *¹

67269 Grünstadt

Order

Testing the oil bonding agent „Elephant Sorb“ according to the requirements for oil bonding agents, revised version, status February 28, 1990 – announcements of BMU [Federal Ministry of Environment] from March 12, 1990 and April 23, 1998.

*¹ The initial test has been under processing number 22 000 797 00 for the company Joseph Raab GmbH & Cie. KG in 56566 Neuwied.

Specification of sample

Oil bonding agent on the basis of
round pumice stone

Name:

“Elephant Sorb”

1. Test specifications/ underlying regulations

Requirements for oil bonding agents, new version from February 28, 1990 – test including item 4.8 of the requirements – suitability for traffic areas

This test certificate is valid until and including December 2, 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.

PZZ00096800.doc

2. Summary of results

The oil bonding agent "Elephant Sorb" 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 09.01.2001 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 22.08.2000 have been submitted.

2.2 Bulk weight (pursuant to section 4.3) 330 g/l

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

128 g oil bonding agent for	100 g	of oil
313 ml oil bonding agent for	100 ml	of oil
1 l oil bonding agent for	0.32 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	:	313 vol.-%

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

1 l oil bonding agent for	0.35 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 9 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	96.6	w/w per cent
0.5 – 0.125 mm	1.9	w/w per cent
< 0.125 mm	0.5	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" complies with the requirements for oil bonding agents of the Minister for Environment, Environmental Protection and Reactor Safety dated March 12, 1990 and April 23, 1998, for type III R.

This test certificate is valid until and including 13.12.2006. This validity can be extended according to no. 5 of the guideline.

Dortmund, 22.01.2001

O/o

<<Signature illegible>>

Dipl.-Ing. [Certified engineer] Moormann

Head of Subject Area

[Stamp of MPA NRW]
