

Product information

## **ULTRASIL® VN 2**

## Characteristic physico-chemical data

Properties and test methods	Unit	Value
Specific surface area (N <sub>2</sub> ) Multipoint following ISO 9277	m²/g	130
Loss on drying 2 h at 105°C following ISO 787-2	%	5.5
pH value 5% in water following ISO 787-9	-	6.9
Tamped density following ISO 787-11	g/l	190
Sieve residue Mocker 63 μm following ISO 787-18	%	≤ 0.1
Electrical conductivity 4% in water following ISO 787-14	μS/cm	≤ 1000
SiO <sub>2</sub> content <sup>2)</sup> following ISO 3262-19	%	≥ 97
Fe content <sup>1)</sup> internal method	ppm	≤ 400
Cu content <sup>1)</sup> internal method	ppm	≤ 6
Mn content <sup>1)</sup> internal method	ppm	≤ 6

- 1) based on original substance
- 2) based on ignited substance (2 h/1000°C)
- \*) The given data are typical values. Specifications on request.

#### **Chemical description**

SiO<sub>2</sub>, synthetically produced amorphous silicon dioxide.

## Registration

т	ΙТ	-D	A C	IL®۱	/N	1
J	L I	-	$\neg$	IL '	VΙN	_

CAS-No.	112926-00-8 7631-86-9
C&L inventory (Europe)	notified
EC (Europe)	231-545-4
REACH (Europe)	registered
ENCS (Japan)	registered
KECI (Korea)	registered
NZIoC (New Zealand), AICS (Australia)	registered
PICCS (Philippines)	registered
IECSC (China)	registered
DSL (Canada), TSCA (USA)	registered

ULTRASIL\* VN 2 as a precipitated silica is used as a reinforcing filler in all kind of rubber applications.

## **Properties and applications**

Due to its lower specific surface area ULTRASIL® VN 2 has a slightly lower reinforcing potential compared to ULTRASIL® VN 3. It imparts to rubber compounds high Shore hardness, tensile strength, tear resistance and abrasion resistance and offers advantages concerning compound viscosity and processing. To achieve these properties it is necessary to use ULTRASIL® 7000 GR and a bifunctional organosilane, such as Si 69°, Si 75°, Si 266° or Si 363. Additionally the use of diethylene glycol, triethanolamine or other alkaline accelerators might be necessary in order to achieve optimum rubber-technical data.

Application fields are: Tires, mechanical rubber goods.

## Safety and handling

Information concerning the safety of this product is listed in the corresponding Safety Data Sheet, which will be sent with the first delivery or upon updating. Such information is also available from Evonik Operations, Product Safety Department, E-MAIL sds-im@evonik.com We recommend to read carefully the safety data sheet prior to the use of our product.

## Packaging and storage

For details regarding our packaging options for this product, please contact your local sales representative. Our silica products are inert and extremely stable chemically. However, due to their high specific surface area, they can absorb moisture and volatile organic compounds from the surrounding atmosphere. Therefore, we recommend storing the products in sealed containers in a dry, cool place, and removed from volatile organic substances. Even if a product is stored under these conditions, after a longer period it can still pick up ambient moisture over time, which could lead to its exceeding the specified moisture content. For this reason, our recommended use-by date is 24 months after date of manufacture. Product more than 24 months old should be tested for moisture content before use in order to make certain that it is still suitable for the intended application.

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

## Applied Technology Evonik Operations GmbH

Business Line Silica
Applied Technology Tire & Rubber
Brühler Straße 2
50389 Wesseling
Germany
PHONE +49 2236 76 3489
ask-si@evonik.com
www.silica-specialist.com

## Europe/ Middle-East/ Africa/ Latin America Evonik Operations GmbH

Business Line Silica Rodenbacher Chaussee 4 63457 Hanau-Wolfgang Germany PHONE +49 6181 59 8118 FAX +49 6181 59 78118 ask-si@evonik.com www.silica-specialist.com

# North America Evonik Corporation

Business Line Silica
299 Jefferson Road
Parsippany, NJ 07054-0677
USA
PHONE +1 888 745-4227
FAX +1 732 981-5275
ask-si@evonik.com
www.silica-specialist.com

#### Asia-Pacific Evonik (SEA) Pte. Ltd.

Business Line Silica
3 Internatioanl Business Park
#07-18, Nordic European Centre
Singapore 609927
PHONE +65 6 809 6851
FAX +65 6 809 6651
ask-si-asia@evonik.com
www.silica-specialist.com

