Product information

ULTRASIL® 7800 GR

Characteristic physico-chemical data

Properties and test methods	Unit	Value
Specific surface area (N_2) Multipoint following ISO 9277	m^2/g	195
Specific surface area (CTAB) following ISO 5794-1G	m^2/g	180
Loss on drying 2h at 105 °C following ISO 787-2	%	5.0
pH value 5 % in water following ISO 787-9	-	6.9
Pour density following ASTM D1513	g/l	260
Electrical conductivity 4 % in water following ISO 787-14	µS/cm	≤ 1300
SA Ro-Tap (> 300 µm) following ISO 5794-1F	%	≥ 80
SA Ro-Tap (< 75 µm) following ISO 5794-1F	%	≤ 10
SiO_2 content [2] following ISO 3262-19	%	≥ 97
Fe content [1] internal method	ppm	≤ 400
Cu content [1] internal method	ppm	≤ 6
Mn content [1] internal method	ppm	≤ 6

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

Chemical description

SiO_2, synthetically produced amorphous silicon dioxide

Registration

ULTRASIL® 7800 GR

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

Precipitated silica for use as a white reinforcing filler in the rubber industry.

Properties and applications

ULTRASIL® 7800 GR is a highly dispersible (HD) silica with a high specific surface area.
Due to its outstanding dispersion behavior and the high reinforcing potential, ULTRASIL® 7800 GR is best suited in car tire treads with demanding requirement on high dynamic stiffness, high abrasion resistance and hysteresis characteristics at moderate compound viscosities. Additionally this silica is also used in truck tire tread compounds with superior cut & chip resistance as well as MRG and shoe soles compounds.
Bifunctional organosilanes like Si 69™, Si 75™, Si 266™ and Si 363™ are required for optimum properties of precipitated silica in compounds. The use of alcohols, amines like triethanolamine or alkaline accelerators might be necessary in order to achieve optimum in-rubber data.

Application fields are: Tires, shoe soles, mechanical rubber goods, all kinds of other high performance rubber applications.

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.

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.

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