

## Product Information

## SIPERNAT® 45

SIPERNAT® represents a specific product range of precipitated silica, aluminum and calcium silicates.

## CAS NUMBER

112926-00-8 (EX 7631-86-9)

## PRODUCT DESCRIPTION

SIPERNAT® 45 is a carrier silica with a particularly high absorbency. It has the capacity to convert liquid, active substances or solutions into powders. Concentrates of up to 75% can be produced using SIPERNAT® 45.

Properties and test methods	Unit	Value
DOA absorption <sup>1)</sup> following ISO 19426	ml/100g	285
Specific surface area (N <sub>2</sub> ) Multipoint following ISO 9277	m <sup>2</sup> /g	265
Particle size, d50 Laser diffraction Following ISO 13320	µm	25
Loss on drying 2 h/105°C Following ISO 787-2	%	≤7
pH value 5% in water Following ISO 787-9	-	7.5
Electrical conductivity 54% in water Following ISO 787-14	µS/cm	≤1300
Tamped density not sieved following ISO 787-11	g/l	150
Loss on ignition <sup>2)</sup> 2 h/1000°C Following ISO 3262-1	%	≤6.5
SiO <sub>2</sub> content <sup>3)</sup> Following ISO 3262-19	%	≥97
Na content <sup>1)</sup> Internal method	%	≤1%
Fe content <sup>1)</sup> Internal method	ppm	≤400
Sulfate content <sup>1)</sup> Internal method	%	≤1.5%
1) based on original substance 2) based on dry substance (2 h/105°C) 3) based on ignited substance (2 h/1000°C)		
*The given data are typical values. Specification available on request.		

## TYPICAL APPLICATIONS

Typical applications include rubber and plastic additives, plant protection formulations and feed additives.

## BENEFITS &amp; ADVANTAGES

Improved flow properties

Offers faster production rates and increased capacity

Reduced production downtime and maintenance

Improved product quality and consistency

Improved package weight accuracy

Evonik provides solutions to improve the flow behavior and storage stability of powders with specialty engineered anti-caking & free-flow agents and carriers. Moisture, pressure, temperature, static charge, fat and oil content all adversely affect powdered and granulated products during production, processing, storage and customer use. They can make products cake, lump, bridge, clog equipment and cause packaging and performance issues. Through advanced, controlled-structure technology and custom application development, Evonik provides free flow agents and carriers that are non-deleterious, odorless and tasteless powders useful for a wide variety of applications.

## HANDLING &amp; PROCESSING

Information concerning the safety of this product is listed in the corresponding Safety Data Sheet. Such information is available from Evonik Operations, Product Safety Department, E-MAIL sds-im@evonik.com. We recommend to read the SDS carefully prior to the use of our product.

## PACKAGING

For details regarding the packaging options for this product, please contact your local sales representative.

## STORAGE

Our silica products are inert and extremely chemically stable. 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 packages in a cool, dry location and removed from volatile substances. Even if the product is stored under these conditions, after a longer period ambient moisture can accumulate, which could lead to the product exceeding its specified moisture content.

## REGISTRATION LISTING

### SIPERNAT® 45

CAS-No.	112926-00-8 (ex 7631-86-9)
REACH (Europe)	registered
TSCA (USA)	registered
AICS (Australia)	
DSL (Canada)	
PICCS (Philippines)	registered
IECSC (China)	
ENCS (Japan)	registered
KECI (Korea)	registered
NZIoC (New Zealand)	registered

### Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

### Evonik Operations GmbH

Silica  
Rodenbacher Chaussee 4  
63457 Hanau  
Germany  
Phone +49 6181 59-12532  
Fax +49 6181 59-712532  
ask-si@evonik.com  
ask-si-asia@evonik.com  
ask-si-america@evonik.com  
[www.silica-specialist.com](http://www.silica-specialist.com)