

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	2.0 / US
Specification	132433	Revision date	05/27/2015
Order Number		Print Date	05/28/2015
		Page	1 / 11

**1. Identification****1.1. Product identifier**

Trade name	ULTRASIL® VN 3
Chemical Name	Silicon dioxide, chemically prepared
CAS-No.	112926-00-8, 7631-86-9

**1.2. Recommended use of the chemical and restrictions on use**

Relevant applications identified	Rubber - producing and processing industry
----------------------------------	--

**1.3. Details of the supplier of the safety data sheet**

Company	Evonik Corporation USA 299 Jefferson Road Parsippany, NJ 07054-0677 USA
Telephone	973-929-8000
Telefax	973-929-8040
Email address	Product-Regulatory-Services@Evonik.com

**1.4. 24 HOUR EMERGENCY TELEPHONE NUMBERS:**

<b>CHEMTREC - US &amp; CANADA:</b>	800-424-9300
<b>CHEMTREC MEXICO:</b>	01-800-681-9531
<b>CHEMTREC INTERNATIONAL:</b>	+1 703-527-3887 (collect calls accepted)
Product Regulatory Services	: 973-929-8060

**2. Hazards identification****2.1. Classification of the substance or mixture**

Classification according to Regulation 29CFR 1910.1200	
Remarks	Not a hazardous substance or mixture.

**2.2. Label elements**

Statutory basis	Classification according to Regulation 29CFR 1910.1200
Remarks	Not a hazardous substance or mixture.

**2.3. Other hazards**

None known

**Silicon dioxide, chemically prepared** A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

**3. Composition/information on ingredients**

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	2.0 / US
Specification	132433	Revision date	05/27/2015
Order Number		Print Date	05/28/2015
		Page	2 / 11

**3.1. Substances****• Silicon dioxide, chemically prepared**

CAS-No. 112926-00-8

Remarks Not a hazardous substance or mixture.

**3.2. Mixtures  
not applicable****4. First aid measures****4.1. Description of first aid measures****Inhalation**

In case product dust is released: Possible discomfort: cough, sneezing  
Move victims into fresh air.

**Skin contact**

Wash off with soap and plenty of water.

**Eye contact**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention.

**Ingestion**

If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention.

**4.2. Most important symptoms and effects, both acute and delayed****Symptoms**

None known

**4.3. Indication of any immediate medical attention and special treatment needed**

No hazards which require special first aid measures.

**5. Fire-fighting measures****5.1. Extinguishing media**

Suitable extinguishing media: Water spray, foam, CO<sub>2</sub>, dry powder., Adapt fire-extinguishing measures to surroundings

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

**5.2. Special hazards arising from the substance or mixture**

None known.

**5.3. Advice for firefighters**

Water used to extinguish fire should not enter drainage systems, soil or stretches of water.  
Ensure there are sufficient retaining facilities for water used to extinguish fire.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

**6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>132433</b>	Revision date	<b>05/27/2015</b>
Order Number		Print Date	<b>05/28/2015</b>
		Page	<b>3 / 11</b>

Wear personal protective equipment.

**6.2. Environmental precautions**

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

**6.3. Methods and material for containment and cleaning up**

Sweep up or vacuum up spillage and collect in suitable container for disposal.

**7. Handling and storage****7.1. Precautions for safe handling**

If necessary: Local ventilation.

**7.2. Conditions for safe storage, including any incompatibilities****Advice on protection against fire and explosion**

Take precautionary measures against static discharges.

**Storage**

Keep in a dry place.

**8. Exposure controls/personal protection****8.1. Control parameters**

• Silicon dioxide, chemically prepared		
CAS-No.	112926-00-8 7631-86-9	
Control parameters type of exposure	5 mg/m <sup>3</sup> Respirable fraction.	Permissible exposure limit:(OSHA Z1)
Control parameters type of exposure	15 mg/m <sup>3</sup> Total dust.	Permissible exposure limit:(OSHA Z1)
Control parameters	20millions of particles per cubic foot of air	Time Weighted Average (TWA):(Z3)
Control parameters	0.8 mg/m <sup>3</sup> The exposure limit is calculated from the equation, 80/(%SiO <sub>2</sub> ), using a value of 100% SiO <sub>2</sub> . Lower values of % SiO <sub>2</sub> will give higher exposure limits.	Time Weighted Average (TWA):(Z3)

**8.2. Exposure controls****Personal protective equipment****Respiratory protection**

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

**Hand protection**

Wear protective gloves made of the following materials: material, rubber, leather.

The material thickness and rupture time data do not apply to non-solute solids / dusts.

The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use.

**Eye protection**

Wear safety glasses with side shields. In case dusts are formed, wear close fitting protective goggles.

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>132433</b>	Revision date	<b>05/27/2015</b>
Order Number		Print Date	<b>05/28/2015</b>
		Page	<b>4 / 11</b>

**Skin and body protection**

A safety shower and eye wash fountain should be readily available.

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

**Hygiene measures**

When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work.

To ensure ideal skin protection: use super fatted soaps and skin cream for skin care.

Wash contaminated clothing before re-use.

**Protective measures**

Handle in accordance with good industrial hygiene and safety practice.

If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.

If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.

**9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

physical state	solid
Colour	white
Form	powder
Odour	odorless
Odour Threshold	not applicable
pH	ca. 6.3 (50 g/l) (20 °C) Method: DIN / ISO 787 / 9 (suspension)
Melting point/range	ca. 1700 °C
Boiling point/range	not determined
Flash point	not applicable
Evaporation rate	not applicable
Flammability (solid, gas)	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure	not applicable
Vapour density	not applicable
Density	ca. 2 g/cm <sup>3</sup> (20 °C)
Water solubility	hardly soluble
Partition coefficient: n-octanol/water	not applicable
Autoignition temperature	not determined

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	2.0 / US
Specification	132433	Revision date	05/27/2015
Order Number		Print Date	05/28/2015
		Page	5 / 11

Thermal decomposition > 2000 °C

Viscosity, dynamic not applicable  
(solid)

**9.2. Other information**

Explosiveness Not to be expected in view of the structure

Minimum ignition energy not determined

Tapped density 150 - 225 g / l  
Method: DIN / ISO 787/11

---

**10. Stability and reactivity****10.1. Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions See Sect. 10.1 Reactivity.

**10.4. Conditions to avoid**

No specific hazards are known.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

None known

Stable under normal conditions.  
Product will not undergo hazardous polymerization.

---

**11. Toxicological information****11.1. Information on toxicological effects**

Acute oral toxicity LD50 Rat: > 5000 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity LC0 Rat: 0.69 mg/l / 4 h  
Method: analogous OECD method  
No deaths occurred.  
comparable product

Acute dermal toxicity LD50 Rabbit: > 5000 mg/kg  
comparable product

Skin irritation Rabbit  
not irritating

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>132433</b>	Revision date	<b>05/27/2015</b>
Order Number		Print Date	<b>05/28/2015</b>
		Page	<b>6 / 11</b>

	Method:	analogous OECD method
Eye irritation	Rabbit not irritating Method:	analogous OECD method comparable product
Sensitization		not known
Assessment of STOT single exposure		no evidence for hazardous properties
Assessment of STOT repeat exposure		no evidence for hazardous properties
Risk of aspiration toxicity		No aspiration toxicity classification
Mutagenicity assessment		no evidence of mutagenic effects
Carcinogenicity		No evidence that cancer may be caused.
carcinogenicity assessment		Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.
Toxicity to reproduction		no evidence of reproductiontoxic properties
Human experience		Silicosis or other product specific illnesses of the respiratory tract were not observed in association with the product.
Further information		The classification criteria are not met based on the available data.

**12. Ecological information****12.1. Toxicity**

Toxicity to fish	LC50 (Brachydanio rerio): > 10000 mg/l / 96 h Method: OECD 203 The reported toxic effects relate to the nominal concentration.
Toxicity in aquatic invertebrates	EC50 Daphnia magna: > 1000 mg/l / 24 h Method: OECD 202 The reported toxic effects relate to the nominal concentration.

**12.2. Persistence and degradability**

Biodegradability	The methods for determining biodegradability are not applicable to inorganic substances.
------------------	--

**12.3. Bioaccumulative potential**

Bioaccumulation	Not to be expected.
-----------------	---------------------

**12.4. Mobility in soil**

Mobility	No remarkable mobility in soil is to be expected.
----------	---

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>132433</b>	Revision date	<b>05/27/2015</b>
Order Number		Print Date	<b>05/28/2015</b>
		Page	<b>7 / 11</b>

**12.5. Other adverse effects**

Further Information

The classification criteria are not met based on the available data.

---

**13. Disposal considerations****13.1. Waste treatment methods****Product**

Waste must be disposed of in accordance with federal, state, provincial and local regulations.

**Uncleaned packaging**

Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

---

**14. Transport information****Not dangerous according to transport regulations.**

- |   |     |
|---|-----|
| 14.1. UN number:                                | --  |
| 14.2. UN proper shipping name:                  | --  |
| 14.3. Transport hazard class(es):               | --  |
| 14.4. Packing group:                            | --  |
| 14.5. Environmental hazards (Marine pollutant): | --  |
| 14.6. Special precautions for user:             | Yes |
- Not dangerous according to transport regulations.

---

**15. Regulatory information****US Federal Regulations****OSHA**

If listed below, chemical specific standards apply to the product or components:

- None listed

**Clean Air Act Section (112)**

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- None listed

**CERCLA Reportable Quantities**

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- None listed

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	2.0 / US
Specification	132433	Revision date	05/27/2015
Order Number		Print Date	05/28/2015
		Page	8 / 11

**SARA Title III Section 311/312 Hazard Categories**

The product meets the criteria only for the listed hazard classes:

- No SARA Hazards

**SARA Title III Section 313 Reportable Substances**

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- None listed

**Toxic Substances Control Act (TSCA)**

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

**State Regulations****California Proposition 65**

A warning under the California Drinking Water Act is required only if listed below:

- None listed

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

**HMIS Ratings**

Health :	1
Flammability :	0
Physical Hazard :	0

**NFPA Ratings**

Health :	1
Flammability :	0
Reactivity :	0

**16. Other information****Further information**

Revision date 05/27/2015

Changes since the last version are highlighted in the margin. This version replaces all previous versions.



**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>132433</b>	Revision date	<b>05/27/2015</b>
Order Number		Print Date	<b>05/28/2015</b>
		Page	<b>9 / 11</b>

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.

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>132433</b>	Revision date	<b>05/27/2015</b>
Order Number		Print Date	<b>05/28/2015</b>
		Page	<b>10 / 11</b>

**Legend**

<b>ACC</b>	American Chemistry Council
<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>ACS</b>	Advisory Committee on Sustainability
<b>ADI</b>	Acceptable Daily Intake
<b>ASTM</b>	American Society for Testing and Materials
<b>ATP</b>	Adaptation to Technical Progress
<b>BCF</b>	Bioconcentration factor
<b>BOD</b>	Biochemical oxygen demand
<b>c.c.</b>	closed cup
<b>CAO</b>	Cargo Aircraft Only
<b>Carc</b>	Carcinogen
<b>CAS</b>	Chemical Abstract Services
<b>CDN</b>	Canada
<b>CEPA</b>	Canadian Environmental Protection Act
<b>CERCLA</b>	Comprehensive Environmental Response – Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>CMR</b>	carcinogenic-mutagenic-toxic for reproduction
<b>COD</b>	Chemical oxygen demand
<b>DIN</b>	German Institute for Standardization
<b>DMEL</b>	Derived minimum effect level
<b>DNEL</b>	Derived no effect level
<b>DOT</b>	Department of Transportation
<b>EC50</b>	half maximal effective concentration
<b>EPA</b>	Environmental Protection Agency
<b>ErC50</b>	Reduction of Growth Rate
<b>ERG</b>	Emergency Response Guide Book
<b>FDA</b>	Food and Drug Administration
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
<b>GLP</b>	Good Laboratory Practice
<b>GMO</b>	Genetic Modified Organism
<b>HCS</b>	Hazard Communication Standard
<b>HMIS</b>	Hazardous Materials Identification System
<b>IARC</b>	International Agency for Research on Cancer
<b>IATA</b>	International Air Transport Association
<b>IBC</b>	Intermediate Bulk Container
<b>ICAO-TI</b>	International Civil Aviation Organization- Technical Instructions
<b>ICCA</b>	International Council of Chemical Association
<b>ID</b>	Identification number
<b>IMDG</b>	International Maritime Dangerous Goods
<b>IUPAC</b>	International Union of Pure and Applied Chemistry
<b>ISO</b>	International Organization For Standardization
<b>LC50</b>	50 % Lethal Concentration
<b>LD50</b>	50 % Lethal Dose
<b>L(EC50)</b>	LC50 or EC50
<b>LOAEL</b>	Low est observed adverse effect level
<b>LOEL</b>	Low est observed effect level
<b>MARPOL</b>	International Convention for the Prevention of Pollution from Ships
<b>NFPA</b>	National Fire Protection Association
<b>NOAEL</b>	No observed adverse effect level
<b>NOEC</b>	no observed effect concentration
<b>NOEL</b>	no observed effect level
<b>o. c.</b>	open cup
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>OEL</b>	Occupational Exposure Limit
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PBT</b>	Persistent, bioaccumulative, toxic
<b>PEC</b>	Predicted effect concentration
<b>PNEC</b>	Predicted no effect concentration
<b>RQ</b>	Reportable Quantity
<b>SDS</b>	Safety Data Sheet
<b>STOT</b>	Specific Target Organ Toxicity
<b>UN</b>	United Nations
<b>vPvB</b>	very persistent, very bioaccumulative

**SAFETY DATA SHEET****ULTRASIL® VN 3**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>132433</b>	Revision date	<b>05/27/2015</b>
Order Number		Print Date	<b>05/28/2015</b>
		Page	<b>11 / 11</b>

**voc** volatile organic compounds  
**WHMIS** Workplace Hazardous Materials Information System  
**WHO** World Health Organization