

**SAFETY DATA SHEET****VP Coupsil® 6411**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>101848</b>	Revision date	<b>05/28/2015</b>
Order Number		Print Date	<b>05/31/2015</b>
		Page	<b>1 / 10</b>

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

Trade name	VP Coupsil® 6411
Chemical Name	Thiocyanic acid, 3-(triethoxysilyl)propylester, reaction products with silica
CAS-No.	219916-66-2

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

Relevant applications identified	VP = Developmental Product. Developmental products are labelled with the VP designation. Commercialization depends on market response. 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**

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)  
Remarks Not a hazardous substance or mixture.

**2.2. Label elements**

Statutory basis	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
Remarks	Not a hazardous substance or mixture.

**2.3. Other hazards**

Low hazard for usual industrial handling.  
Inhalation No hazard expected in normal use.  
Skin No hazard expected in normal use.

**SAFETY DATA SHEET****VP Coupsil® 6411**

Material no.		Version	2.0 / US
Specification	101848	Revision date	05/28/2015
Order Number		Print Date	05/31/2015
		Page	2 / 10

Eyes Possibly irritating.  
Ingestion No hazard expected in normal use.

---

**3. Composition/information on ingredients****3.1. Substances****Other information**

This product does not contain any components considered to be health hazards under the OSHA Hazard Communication Standard 29 CFR 1910.1200 or under the WHMIS Controlled Product Regulations in Canada.

**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**

May be released in case of fire: ethanol, carbon monoxide, carbon dioxide, organic and sulphurous products of decomposition.

**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.

**SAFETY DATA SHEET****VP Coupsil® 6411**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>101848</b>	Revision date	<b>05/28/2015</b>
Order Number		Print Date	<b>05/31/2015</b>
		Page	<b>3 / 10</b>

In the event of fire, wear self-contained breathing apparatus.

---

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

Wear personal protective equipment.

**6.2. Environmental precautions**

Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

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

Use mechanical handling equipment. Collect in suitable containers. Avoid dust formation.

---

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

Local ventilation. Always close container tightly after removal of product.

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

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

Explosion protection is recommended in case the explosion limits for the following substance might be exceeded: Ethanol.

When repairs of the production system are to be made (e.g. welding work), the section to be repaired must be essentially free of product.

**Storage**

Keep in a dry, cool place.

Assure impermeability at all times.

**Storage stability**

<= 12 month

---

**8. Exposure controls/personal protection****8.1. Control parameters****8.2. Exposure controls****Engineering measures**

Ensure suitable suction/aeration at the work place and with operational machinery.

**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**

Glove material butyl-rubber

Material thickness 0.5 mm

Break through time > 480 min

Glove material Polychloroprene (PCP)

Material thickness 0.5 mm

Break through time 160 min

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

**SAFETY DATA SHEET****VP Coupsil® 6411**

Material no.		Version	2.0 / US
Specification	101848	Revision date	05/28/2015
Order Number		Print Date	05/31/2015
		Page	4 / 10

**Eye protection**

Safety glasses with side-shields  
If dust occurs: basket-shaped glasses

**Skin and body protection**

No particular measures required.

**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.  
Remove and 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	light yellow
Form	powder
Odour	characteristic
Odour Threshold	not determined
pH	7.2 (50 g / l) (20 °C) (suspension)
Melting point/range	not applicable
Decomposition	
Boiling point/range	not applicable
Decomposition	
Flash point	not applicable
Evaporation rate	not determined
Flammability (solid, gas)	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Vapour pressure	not determined
Vapour density	not determined
Density	2.0 g/cm <sup>3</sup> (20 °C)
Water solubility	insoluble
Partition coefficient: n-octanol/water	not applicable

**SAFETY DATA SHEET****VP Coupsil® 6411**

Material no.		Version	2.0 / US
Specification	101848	Revision date	05/28/2015
Order Number		Print Date	05/31/2015
		Page	5 / 10

Autoignition temperature > 300 °C  
Method: VDI 2263

Thermal decomposition > 200 °C

Viscosity, dynamic not applicable

**9.2. Other information**

Explosiveness not determined

Tapped density 220 kg/m<sup>3</sup>

Metal corrosion No data available

---

**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 Formation of flammable or explosive vapour/air mixtures possible.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

Reaction with water, acids and alkaline solutions., Formation of ethanol.

**10.6. Hazardous decomposition products**

decomposition products with heating above decomposition temperature  
Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), organic and sulphurous products of decomposition,  
Ethanol

---

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

*No toxicological tests are available on the product.*

Acute oral toxicity LD50 Rat: > 2150 mg/kg  
Method: OECD Test Guideline 401  
Assessment: The substance or mixture has no acute oral toxicity  
(limit test)  
literature

Skin irritation Rabbit  
not irritating  
Method: OECD Test Guideline 404  
literature

Eye irritation Rabbit

**SAFETY DATA SHEET****VP Coupsil® 6411**

Material no.		Version	2.0 / US
Specification	101848	Revision date	05/28/2015
Order Number		Print Date	05/31/2015
		Page	6 / 10

	not irritating
Method:	OECD Test Guideline 405
	literature
Sensitization	not known
Assessment of STOT single exposure	No data available
Assessment of STOT repeat exposure	No data available
Risk of aspiration toxicity	No aspiration toxicity classification
Mutagenicity assessment	No data available
Carcinogenicity	No data available
Toxicity to reproduction	No data available

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

Toxicity to fish  
LC50 (Brachydanio rerio): > 10000 mg/l / 96 h  
Test substance: Silicon dioxide, derived from chemical synthesis  
Method: OECD 203  
The reported toxic effects relate to the nominal concentration.

Toxicity in aquatic invertebrates  
EC50 Daphnia magna: > 1000 mg/l / 24 h  
Test substance: Silicon dioxide, derived from chemical synthesis  
Method: OECD 202  
The reported toxic effects relate to the nominal concentration.

**12.2. Persistence and degradability**

Biodegradability  
The methods designed to assess persistence and biodegradability are not applicable to this product, in analogy 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.

**12.5. Other adverse effects**

Further Information  
No ecotoxicological studies are available.

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

**SAFETY DATA SHEET****VP Coupsil® 6411**

Material no.		Version	2.0 / US
Specification	101848	Revision date	05/28/2015
Order Number		Print Date	05/31/2015
		Page	7 / 10

**Product**

Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method.

**Uncleaned packaging**

Contaminated packaging should ideally be emptied; it can then be recycled after having been decontaminated.

Other countries: observe the national 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

**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:

**SAFETY DATA SHEET****VP Coupsil® 6411**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>101848</b>	Revision date	<b>05/28/2015</b>
Order Number		Print Date	<b>05/31/2015</b>
		Page	<b>8 / 10</b>

- 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 :	0
Flammability :	0
Physical Hazard :	0

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

Revision date 05/28/2015

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

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****VP Coupsil® 6411**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>101848</b>	Revision date	<b>05/28/2015</b>
Order Number		Print Date	<b>05/31/2015</b>
		Page	<b>9 / 10</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****VP Coupsil® 6411**

Material no.		Version	<b>2.0 / US</b>
Specification	<b>101848</b>	Revision date	<b>05/28/2015</b>
Order Number		Print Date	<b>05/31/2015</b>
		Page	<b>10 / 10</b>

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