Printing date 01/10/2013 Reviewed on 01/10/2013

### 1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: VpCI-309

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the preparation Corrosion inhibitors
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Cortec Corporation

4119 White Bear Parkway

St. Paul, MN 55110 USA

Phone (651) 429-1100

Fax (651) 429-1122

### · Information department:

info@cortecvci.com

Product safety department.

· Emergency telephone number: Chemtrec (for spill, leak, fire exposure or accident): 1-800-424-9300

### 2 Hazards identification

· Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void
- · Information concerning particular hazards for human and environment: Harmful if swallowed.
- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Additional information:

WARNING! AS WITH ALL ORGANIC POWDERS, MAY FORM COMBUSTIBLE DUST CONCENTRATION IN AIR

Void

- · Classification system
- · NFPA ratings (scale 0-4)



Health = 1 Fire = 1 Reactivity = 1

· HMIS rating system (0-4)



Health = 1 Flammability = 1 Reactivity = 1

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

- US

Printing date 01/10/2013 Reviewed on 01/10/2013

Trade name: VpCI-309

(Contd. of page 1)

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

· Additional information For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Immediately wash with water and soap and rinse thoroughly.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label Seek immediate medical advice.

- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture

Carbon monoxide (CO)

As with all organic dusts, fine particles suspended in air in critical proportions and in the presence of an ignition source may ignite and/or explode. Dust may be sensitive to ignition by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources. As a precaution, implement standard safety measures for handling finely divided organic powders.

- · Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.
- · Additional information

Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures
- Use respiratory protective device against the effects of fumes/dust/aerosol.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.

(Contd. on page 3)

Printing date 01/10/2013 Reviewed on 01/10/2013

Trade name: VpCI-309

(Contd. of page 2)

#### · Reference to other sections

Use extreme caution when dispersing dust in the air. Non-sparking tools/equipment should be used.

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

- · Handling
- · Precautions for safe handling

Keep receptacles tightly sealed.

No special measures required.

· Information about protection against explosions and fires:

Minimize dust generation and accumulation.

Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations.

Provide adequate precautions, such as electrical grounding and bonding.

Wear shoes with conductive soles.

Use explosion-proof apparatus / fittings and spark-proof tools.

Dust can combine with air to form an explosive mixture.

As a precaution to control dust explosion potential, implement safety measures to control ignition sources and dispersion of dusts. See NFPA standard 654, OSHA 29CFR1910.39 and others for more details.

- · Conditions for safe storage, including any incompatibilities
- ·Storage
- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- · Information about storage in one common storage facility: Store away from oxidizing agents.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

#### · Additional information about design of technical systems:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Use only appropriately classified electrical equipment and powered industrial trucks.

#### · Control parameters

## · Components with limit values that require monitoring at the workplace:

#### 112926-00-8 Silicon dioxide (2.5-10%)

PEL 20mppcf or 80mg/m3 /%SiO2 mg/m³

REL 6 mg/m<sup>3</sup>

See Pocket Guide App. C

TLV TLV withdrawn

· Additional information: The lists that were valid during the creation were used as basis.

(Contd. on page 4)

Printing date 01/10/2013 Reviewed on 01/10/2013

Trade name: VpCI-309

(Contd. of page 3)

- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Eye protection: Not required.
- · **Body protection:** Protective work clothing.

Physical and chemical proper	eres
· Information on basic physical and o · General Information	chemical properties
· Appearance: Form:	Powder
Color:	White
· Odor:	Characteristic
· Odour threshold:	Not determined.
· pH-value at 20 °C (68 °F):	6.5-8 (1% aqueous)
· Change in condition	
Melting point/Melting range:	undetermined
<b>Boiling point/Boiling range:</b>	undetermined
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Not determined.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	As with all dusts, fine particles suspended in air in critical proprtion and in the presence of an ignition source may ignite and/or explode Dust may be sensitive to ignition by electrostatic discharge, electrica arcs, sparks, welding torches, cigarettes, open flame, or other significan heat sources. As a precaution, implement standard safety measures fo handling finely divided organic powders.  Risk of explosion by shock, friction, fire or other sources of ignition.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	Not determined

Printing date 01/10/2013 Reviewed on 01/10/2013

Trade name: VpCI-309

	(Contd. of page
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Partly miscible
· Partition coefficient (n-octanol/wa	ter): Not determined.
· Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	0.0 %
Solids content:	96-100 %
· Other information	The above data are typical values and do not constitute a specification.

## 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Repeated or prolonged skin contact with this product may produce skin irritation.
- · on the eve: May be irritating.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
112926-00-8 Silicon dioxide	3
· NTP (National Toxicology Program)	
None of the ingredients is listed.	

Printing date 01/10/2013 Reviewed on 01/10/2013

Trade name: VpCI-309

(Contd. of page 5)

## 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number	
ADR	Not applicable Not applicable
UN proper shipping name	Not applicable
Transport hazard class(es)	
· IMDG, IATA	
· Class	Not applicable
· Packing group	Not Applicable
· Environmental hazards:	
· Marine pollutant:	No
Special precautions for user	Not applicable.
· Transport in bulk according to Ann	
MARPOL73/78 and the IBC Code	Not applicable.

- IICA

Printing date 01/10/2013 Reviewed on 01/10/2013

Trade name: VpCI-309

(Contd. of page 6)

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

USA ·