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1 Identification

· Product identifier

· Trade name: VpCI®-308 S

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

No further relevant information available.

- · Application of the substance / the mixture 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: regulatory@cortecvci.com
- · Emergency telephone number:

Spill, Leak, Fire, Exposure, or Accident

24 hour CHEMTREC contact:

USA and Canada 1-800-424-9300

International +1 703-527-3887 (collect calls accepted)

### 2 Hazard(s) identification

· Classification of the substance or mixture



Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Warning

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• **Hazard-determining components of labeling:** Sulfonic acids, C10-18-alkane, sodium salts

proprietary ammonia derivate

Benzotriazole

· Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

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## Safety Data Sheet acc. to OSHA HCS

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Wear protective gloves.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards

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

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

### 3 Composition/information on ingredients

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

· Dangerous components:			
	1 1 2	50-100%	
	♦ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335		
CAS: 68037-49-0	Sulfonic acids, C10-18-alkane, sodium salts	2.5-10%	
EINECS: 268-213-3	♦ Acute Tox. 3, H301		
CAS: 95-14-7	Benzotriazole	2.5-10%	
EINECS: 202-394-1	♦ Acute Tox. 3, H301		
CAS: 112926-00-8	Silicon dioxide	2.5-10%	
	Eye Irrit. 2B, H320		

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

### 4 First-aid measures

- · Description of first aid measures
- · After inhalation In case of unconsciousness place patient stably on side position for transportation.
- · After skin contact Immediately wash with water and soap and rinse thoroughly.
- · After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing If symptoms persist consult doctor.
- · 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** Fire-fighting 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)

Nitrogen oxides (NOx)

As with all 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

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safety measures for handling finely divided organic powders.

 $(Contd.\ of\ page\ 2)$ 

· 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.





Wear protective equipment. Keep unprotected persons away.

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

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Ensure adequate ventilation.
- · Reference to other sections

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.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

· Information about protection against explosions and fires:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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

Dust can combine with air to form an explosive mixture.

Wear shoes with conductive soles.

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.

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: No special requirements.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Keep receptacle tightly sealed.

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· Specific end use(s) No further relevant information available.

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### 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

WEL Long Term (8hr TWA) Inhalable dusts: 10mg/m3 WEL Long Term (8hr TWA) Respirable dusts: 4mg/m3

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

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

PEL	20mppcf or 80mg/m3 /%SiO2
REL	Long-term value: 6 mg/m <sup>3</sup>
	Long-term value: 6 mg/m³ See Pocket Guide App. C
TLV	TLV withdrawn

#### · Additional information:

CONTROL PARAMETERS: 10mg/m3 inhalable and 4mg/m3 respirable 8 hr TWA.

The lists that were valid during the creation were used as basis.

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

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

#### · Breathing equipment:



Use suitable respiratory protective device in case of insufficient ventilation.

### · Protection of hands:

Protective gloves

I.E., Nitrile, Viton, Neoprene

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: Tightly sealed goggles.
- · **Body protection:** Protective work clothing.

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Physical and chemical proper	rties		
· Information on basic physical and chemical properties · General Information			
Appearance: Form:	Crystalline powder		
Color:	Whitish		
Odor:	Characteristic		
Odour threshold:	Not determined.		
pH-value at 20 $^{\circ}$ C (68 $^{\circ}$ F):	6.0-7.0 (1% aqueous)		
Change in condition Melting point/Melting range: Boiling point/Boiling range:	188-203 °C (370-397 °F) undetermined		
Flash point:	Not applicable		
Flammability (solid, gaseous)	Not determined.		
Ignition temperature:	400 °C (752 °F)		
<b>Decomposition temperature:</b>	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 explod Dust may be sensitive to ignition by electrostatic discharge, electric arcs, sparks, welding torches, cigarettes, open flame, or other significa heat sources. As a precaution, implement standard safety measures flandling finely divided organic powders.  Risk of explosion by shock, friction, fire or other sources of ignition.		
<b>Explosion limits:</b>			
Lower:	Not determined.		
Upper:	Not determined.		
Vapor pressure:	Not applicable.		
Density:	Not determined		
Relative density	Not determined.		
Vapour density Evaporation rate	Not applicable. Not applicable.		
•	Not applicable.		
Solubility in / Miscibility with Water:	Soluble		
Partition coefficient (n-octanol/wat	er): Not determined.		
Viscosity:			
dynamic:	Not applicable.		
kinematic:	Not applicable.		
Solvent content: Organic solvents:	0.0 %		
Solids content:	98-100 %		
	(Contd. on page		

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· 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: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

· 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.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 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.

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· Other adverse effects No further relevant information available.

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### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

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· UN-Number	
· DOT, ADN, IMDG, IATA	Void
· ADR	Void
ADK	
	Not applicable
· UN proper shipping name	
DOT, ADR, ADN, IMDG, IATA	Void
DO1, ADK, ADN, INIDG, IATA	Volu
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Void
Ciuss	· old
· Packing group	
· DOT, ADR, IMDG, IATA	Void
· · · · · · · · · · · · · · · · · · ·	
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	-

## 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.

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### · 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.

### · Canadian Domestic Substances List (DSL) (-)

All ingredients are listed.

### · Philippines Inventory of Chemicals and Chemical Substances (-)

All ingredients are listed.

### · Chinese Chemical Inventory of Existing Chemical Substances (-)

All ingredients are listed.

#### · Australian Inventory of Chemical Substances (-)

All ingredients are listed.

### · New Zealand Inventory of Chemicals (-)

All ingredients are listed.

#### · Existing Chemical Substances (-)

Sulfonic acids, C10-18-alkane, sodium salts

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS07

### · Signal word Warning

#### · Hazard-determining components of labeling:

Sulfonic acids, C10-18-alkane, sodium salts

proprietary ammonia derivate

Benzotriazole

### · Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

#### · Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

USA

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### 16 Other information

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.

Cortec Corporation does not warranty any translation of this SDS not created by Cortec Corporation.

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.

· Date of preparation / last revision 06/01/2015 / -

### · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

\* Data compared to the previous version altered.

USA