



Safety Data Sheet
acc. to OSHA HCS

Printing date 03/05/2020

Reviewed on 03/05/2020

1 Identification

- **Product identifier**
- **Trade name:** Phoscrete VO
- **Article number:** PC-VO
- **Application of the substance / the mixture** Concrete/Mortar admixtures
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Phoscrete Corporation
265 S Federal Hwy Suite 320
Deerfield Beach FL USA 33441

Tel: 561-420-0595
Fax: 561-420-0599
Email: safety@phoscrete.com
Website: www.phoscrete.com
- **Information department:**
For Hazardous Materials [or Dangerous Goods] Incident
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC 24 Hours
1-800-424-9300
703-527-3887
CCN: 866520
- **Emergency telephone number:** 1.800.424.9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

Repr. 1A H360 May damage fertility or the unborn child.

- **Label elements**

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

- **Hazard pictograms**



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
cristobalite

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Quartz (SiO₂)

- **Hazard statements**

May cause cancer.
May damage fertility or the unborn child.

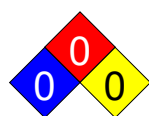
- **Precautionary statements**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
Store locked up.

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

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *0
Fire = 0
Reactivity = 0

- **Other hazards**

- **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:**

1344-28-1	aluminium oxide (Calcined)	19-26%
1309-48-4	magnesium oxide	2.5-5%
10043-35-3	boric acid	≤2.5%
14464-46-1	crystalobalite	≤2.5%
14808-60-7	Quartz (SiO ₂)	≤2.5%

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:** If symptoms persist consult doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
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.
- **Protective Action Criteria for Chemicals**

· PAC-1:

1344-28-1	aluminium oxide (Calcined)	15 mg/m ³
7631-86-9	silicon dioxide (Amorphous)	18 mg/m ³
69012-64-2	Silica-Amorphous Silica fume	45 mg/m ³
1309-48-4	magnesium oxide	30 mg/m ³
10043-35-3	boric acid	6 mg/m ³
14464-46-1	crystalite	0.075 mg/m ³
1302-76-7	Kyanite	3 mg/m ³
14808-60-7	Quartz (SiO ₂)	0.075 mg/m ³
100-42-5	styrene	20 ppm

· PAC-2:

1344-28-1	aluminium oxide (Calcined)	170 mg/m ³
7631-86-9	silicon dioxide (Amorphous)	740 mg/m ³
69012-64-2	Silica-Amorphous Silica fume	500 mg/m ³
1309-48-4	magnesium oxide	120 mg/m ³
10043-35-3	boric acid	23 mg/m ³
14464-46-1	crystalite	33 mg/m ³
1302-76-7	Kyanite	33 mg/m ³
14808-60-7	Quartz (SiO ₂)	33 mg/m ³
100-42-5	styrene	130 ppm

· PAC-3:

1344-28-1	aluminium oxide (Calcined)	990 mg/m ³
7631-86-9	silicon dioxide (Amorphous)	4,500 mg/m ³

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69012-64-2	Silica-Amorphous Silica fume	3,000 mg/m ³
1309-48-4	magnesium oxide	730 mg/m ³
10043-35-3	boric acid	830 mg/m ³
14464-46-1	crystalite	200 mg/m ³
1302-76-7	Kyanite	200 mg/m ³
14808-60-7	Quartz (SiO ₂)	200 mg/m ³
100-42-5	styrene	1100* ppm

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

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

1344-28-1 aluminium oxide (Calcined)	
PEL	Long-term value: 15*; 5** mg/m ³ *Total dust; ** Respirable fraction
REL	Long-term value: 10* 5** mg/m ³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV	Long-term value: 1* mg/m ³ as Al; *as respirable fraction
69012-64-2 Silica-Amorphous Silica fume	
TLV	TLV withdrawn
1309-48-4 magnesium oxide	
PEL	Long-term value: 15* mg/m ³ fume; *total particulate
TLV	Long-term value: 10* mg/m ³ *as inhalable fraction
10043-35-3 boric acid	
TLV	Short-term value: 6* mg/m ³ Long-term value: 2* mg/m ³ *as inhalable fraction

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14464-46-1 cristobalite

PEL	Long-term value: 0.05* mg/m ³ *resp. dust; ½ value from resp.dust formulae Quartz
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable fraction

14808-60-7 Quartz (SiO₂)

PEL	Long-term value: 0.05* mg/m ³ *resp. dust; 30mg/m ³ /%SiO ₂ +2
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable fraction

· **Additional information:** 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.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **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

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Fluorocarbon rubber (Viton)

· **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.

For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 6).

· **Eye protection:**



Tightly sealed goggles

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9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
· Form:	Solid
· Color:	According to product specification
· Odor: Characteristic	
· Odor threshold: Not determined.	
· pH-value: Not applicable.	
· Change in condition	
· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Undetermined.
· Flash point: Not applicable.	
· Flammability (solid, gaseous): Not determined.	
· Decomposition temperature: Not determined.	
· Auto igniting: Product is not selfigniting.	
· Danger of explosion: Product does not present an explosion hazard.	
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure: Not applicable.	
· Density: Not determined.	
· Relative density Not determined.	
· Vapor density Not applicable.	
· Evaporation rate Not applicable.	
· Solubility in / Miscibility with	
· Water:	Insoluble.
· Partition coefficient (n-octanol/water): Not determined.	
· Viscosity:	
· Dynamic:	Not applicable.
· Kinematic:	Not applicable.
· Solvent content:	
· Organic solvents:	0.1 %
· VOC content:	0.05 %
· Solids content: 72.0 %	
· Other information No further relevant information available.	

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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.

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- **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:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

7631-86-9	silicon dioxide (Amorphous)	3
69012-64-2	Silica-Amorphous Silica fume	3
14464-46-1	crystalobalite	1
14808-60-7	Quartz (SiO ₂)	1
100-42-5	styrene	2B

- **NTP (National Toxicology Program)**

14464-46-1	crystalobalite	K
14808-60-7	Quartz (SiO ₂)	K
100-42-5	styrene	R

- **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 (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.

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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.

14 Transport information

· UN-Number · DOT, ADR, IMDG, IATA	None
· UN proper shipping name · DOT, ADR, IMDG, IATA	None
· Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class	None
· Packing group · DOT, ADR, IMDG, IATA	None
· Environmental hazards:	Not applicable.
· 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":	None

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.		
· Section 313 (Specific toxic chemical listings):		
1344-28-1	aluminium oxide (Calcined)	
100-42-5	styrene	
· TSCA (Toxic Substances Control Act):		
1302-93-8	Calcined Bauxitic Kaolin (Mullite)	ACTIVE
1344-28-1	aluminium oxide (Calcined)	ACTIVE
7631-86-9	silicon dioxide (Amorphous)	ACTIVE
69012-64-2	Silica-Amorphous Silica fume	ACTIVE
1309-48-4	magnesium oxide	ACTIVE
10043-35-3	boric acid	ACTIVE
14464-46-1	cristobalite	ACTIVE

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14808-60-7	Quartz (SiO ₂)	ACTIVE
100-42-5	styrene	ACTIVE

· **Hazardous Air Pollutants**

100-42-5	styrene
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· **Proposition 65**· **Chemicals known to cause cancer:**

14464-46-1	cristobalite
14808-60-7	Quartz (SiO ₂)
100-42-5	styrene

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**· **EPA (Environmental Protection Agency)**

10043-35-3	boric acid	I (oral)
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· **TLV (Threshold Limit Value established by ACGIH)**

1344-28-1	aluminium oxide (Calcined)	A4
1309-48-4	magnesium oxide	A4
10043-35-3	boric acid	A4
14464-46-1	cristobalite	A2
14808-60-7	Quartz (SiO ₂)	A2
100-42-5	styrene	A4

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

14464-46-1	cristobalite
14808-60-7	Quartz (SiO ₂)

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

GHS08

· **Signal word** Danger· **Hazard-determining components of labeling:**cristobalite
Quartz (SiO₂)· **Hazard statements**May cause cancer.
May damage fertility or the unborn child.· **Precautionary statements**Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

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Wear protective gloves/protective clothing/eye protection/face protection.
 IF exposed or concerned: Get medical advice/attention.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
 Exceptions can be made by the authorities in certain cases.

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

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.

· **Department issuing SDS:** Manufacturing Facility - Engineering Department

· **Contact:** Manufacturer / Supplier

· **Date of preparation / last revision** 03/05/2020 / -

· **Abbreviations and acronyms:**

ADR: 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

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Carc. 1A: Carcinogenicity – Category 1A

Repr. 1A: Reproductive toxicity – Category 1A