



## VSC Set-Control

### SECTION 1 – IDENTIFICATION

PRODUCT NAME: VSC Set Control  
IDENTIFICATION NUMBER: KB0001  
SUPPLIER/MANUFACTURER: VANBERG SPECIALIZED COATINGS  
10705 COTTONWOOD ST  
LENEXA, KS 66215-2032

EMERGENCY # 1-800-255-3924  
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PREPARE DATE: AUGUST 27, 2015

### SECTION 2 – HAZARDS IDENTIFICATION

**Classification of the Substance or Mixture:**

Eye irritation, Category 2 H319: Causes serious eye irritation  
Irritant R36: Irritating to eyes

**Label Elements:**



**Signal Word:** Warning

**Hazard Statement:** Causes serious eye irritation

**Prevention:** Wash skin thoroughly after handling. Wear protective gloves/eye protection/face protection.

**Response:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

**Mixtures:**

Chemical Name	CAS #	Concentration
Citric acid anhydrous	77-92-9	100%

### SECTION 4 – FIRST AID MEASURES

**Description of first aid measures**

**General Advice:**

Get medical advice/attention if you feel unwell. Show this SDS sheet to the doctor in attendance.

**Inhalation:**

If breathed in, move person into fresh air.

**Skin Contact:**

Immediately flush skin with large amounts of water.

**Eye Contact:**

Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids.

**Ingestion:**

Drink plenty of water. If swallowed, DO NOT induce vomiting.

**Most Important symptoms/effects, acute and delayed:****Symptoms:**

No information available.

**Indication of any immediate medical attention and special treatment needed:**

No information available.

**SECTION 5 – FIRE FIGHTING MEASURES****Suitable Extinguishing Media**

Water spray, dry powder, foam, carbon dioxide (co2).

**Special hazards arising from the substance of mixture****Special hazards during fire-fighting**

Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products formed under fire conditions. Exposure to decomposition products may be a hazard to health.

**Advice for firefighters****Special protective equipment for firefighters**

Wear self-contained breathing apparatus for fire-fighting if necessary. Use personal protective equipment.

**Further Information**

Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. In the event of fire and/or explosion do not breathe fumes.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

**Methods and materials for containment and cleaning up**

Use mechanical handling equipment. Keep in suitable, closed containers for disposal. Clean contaminated surface thoroughly.

**SECTION 7 – HANDLING & STORAGE****Precautions for safe handling**

Avoid creating dust. Do not breathe dust. Avoid contact with skin and eyes.

**Advice on protection against fire and explosion**

Normal measures for preventative fire protection.

**Dust explosion class**

St1

**Conditions for safe storage, including any incompatibilities****Requirements for storage areas and containers**

Keep in an area equipped with acid resistant flooring. Keep container tightly closed in a dry and well-ventilated place.

**Further information on storage conditions**

Do not store at temperatures above 30°C / 86°F.

**Advice on common storage**

Incompatible with strong bases and oxidizing agents.

**Other Data**

No decomposition if stored and applied as directed.

## SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

### Control parameters

PNEC: Water

Value: 440 mg/l

PNEC: Fresh water sediment

Value: 34,6 mg/kg

PNEC: Marine sediment

Value: 3,46 mg/kg

PNEC: Soil

Value: 33,1 mg/kg

### Engineering measures

Provide adequate ventilation

### Personal protective equipment

#### Respiratory Protection

In the case of dust or aerosol formation use respirator with an approved filter. Half mask with a particle filter P2 (EN 143).

#### Hand Protection

Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific place of work. For Special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

#### Eye protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. General hygiene practice. Do not breathe dust. Avoid contact with skin, eyes, and clothing.

#### Environmental exposure controls

#### General advice

Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

## SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

**Appearance:** Crystalline

**Color:** White

**Odor:** Odorless

**Flash point:** n/a

**Flammability (solid, gas):** Does not ignite

**Oxidizing properties:** No oxidizing effect

**Molecular Weight:** 192,13 g/mol

**pH:** 1,8 at 5% 25°C

**Melting point/rage:** ca. 153°C

**Density:** 1,665 g/cm<sup>3</sup> at 20°C

**Water solubility:** ca. 800 g/l at 20°C

## SECTION 10 – STABILITY & REACTIVITY

### Reactivity

No decomposition if stored and applied as directed.

### Chemical stability

Stable under normal conditions.

### Possibility of hazardous reactions

### Hazardous reactions

None known.

### Conditions to avoid

Avoid dust formation.

## **Incompatible materials**

### **Materials to avoid**

Strong bases. Oxidizing Agents

### **Hazardous decomposition products**

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

## **SECTION 11 – TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

#### **Acute oral toxicity**

##### **Citric acid anhydrous:**

LD50 oral: 5,400, g/kg

Species: Mouse

Method: OECD Test Guideline 401

LD50 Oral: 11,700 mg/kg

Species: Rat

Method: OECD Test Guideline 401

#### **Acute dermal toxicity**

##### **Citric acid anhydrous:**

LD50 Dermal: >2,000 mg/kg

Species: Rat

#### **Acute toxicity (other routes of administration)**

##### **Citric acid anhydrous:**

LD50: 725 mg/kg

Application route: i.p.

Species: Rat

LD50: 940 mg/kg

Application route: i.p.

Species: Mouse

### **Skin corrosion/irritation**

#### **Skin irritation**

##### **Citric acid anhydrous:**

Species: Rabbit

Result: No skin irritation

May cause skin irritation in susceptible persons.

### **Serious eye damage/eye irritation**

#### **Eye irritation**

##### **Citric acid anhydrous:**

Species: Rabbit

Result: Irritating to eyes.

### **Respiratory or skin sensitization**

#### **Sensitization**

##### **Citric acid anhydrous:**

Maximization Test

Species: Guinea pig

Result: Does not cause skin sensitization.

Method: OECD Test Guideline 406

## **Germ cell mutagenicity**

### **Assessment**

#### **Citric acid anhydrous:**

In vivo tests did not show mutagenic effects.

## **Carcinogenicity**

### **Assessment**

#### **Citric acid anhydrous:**

Did not show carcinogenic or teratogenic effects in animal experiments.

## **Reproductive toxicity**

### **Assessment**

#### **Citric acid anhydrous:**

No toxicity to reproduction.

## **Target Organ Systemic Toxicant – Repeated exposure**

## **SECTION 12 – ECOLOGICAL INFORMATION**

### **Toxicity**

#### **Toxicity to fish**

##### **Citric acid anhydrous:**

LC50: 440 mg/l

Exposure time: 48 hrs.

Species: *Leuciscusidus* (golden orfa)

Static Test

Method: OECD Test Guideline 203

#### **Toxicity to daphnia and other aquatic invertebrates**

##### **Citric acid anhydrous:**

LC50: 1,535 mg/l

Exposure time: 24 hrs.

Species: *Daphnia magna* (Walter flear)

Static test

#### **Toxicity to algae**

##### **Citric acid anhydrous:**

425 mg/l

Exposure time: 168 hrs.

Species: *Scenedesmus quadricauda* (Green algae)

Static test

#### **Toxicity to bacteria**

##### **Citric acid anhydrous:**

>10,000 mg/l

### **Persistence and degradability**

#### **Biodegradability**

##### **Citric acid anhydrous:**

97%

Testing period: 28 days

Method: OECD Test Guideline 301B  
Readily biodegradable

100%  
Testing period: 19 days  
Method: OECD Test Gridline 301E  
Readily biodegradable

**Biochemical Oxygen Demand (BOD)**

**Citric acid anhydrous:** 526 mg/g

**Chemical Oxygen Demand (COD)**

**Citric acid anhydrous:** 728 mg/g

**Bioaccumulative potential**

**Citric acid anhydrous:**

The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

**Mobility in soil**

**Results of PBT and vPvB assessment**

**Citric acid anhydrous:**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

**SECTION 13 – DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Product:**

Where possible recycling is preferred to disposal or incineration. Can be landfilled or incinerated, when in compliance with local regulations. Waste codes should be assigned by the user based on the application for which the product was used. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

**Contaminated packaging:**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of as unused product.

**SECTION 14 – TRANSPORTATION INFORMATION**

**ADR**

Not dangerous goods

**DOT**

Not a Hazardous Material

**TDG**

Not dangerous goods

**IATA**

Not dangerous goods

**IMDG**

Not dangerous goods

**RID**

Not dangerous goods

**SECTION 15 – REGULATORY INFORMATION**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Major Accident Hazard Legislation: 96/82/EC Update: 2003  
Directive 96/82/EC does not apply

**Notification Status**

CERCLA: Not considered hazardous

SARA Title III: Not considered hazardous.

WHMIS: Class E

TSCA: On TSCA Inventory.

EINECS: On the inventory, or in compliance with the inventory.

AICS: On the inventory, or in compliance with the inventory.

DSL: All components of this product are on the Canadian DSL list.

ENCS: On the inventory, or in compliance with the inventory.

KECI: On the inventory, or in compliance with the inventory.

PICCS: On the inventory, or in compliance with the inventory.

IECSC: On the inventory, or in compliance with the inventory.

NZIoC: On the inventory, or in compliance with the inventory.

## SECTION 16 – OTHER INFORMATION

### HMIS ratings:

Health	1
Flammability	0
Reactivity	0

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The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

**END OF SDS**