

# innovative turf solutions

## Safety Data Sheet

Rev. Date: 06/10/15

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### FLOC 20, 05, 60, 10, 30

Waste Treatment Application Formulation  
Product mixture  
Product Code: FLOC Clay-based flocculants

Innovative Turf Solutions, LLC  
3318 Glenmont Lane  
Cincinnati, OH 45248  
Website: [www.innovativeturfsolutions.com](http://www.innovativeturfsolutions.com)

1-513-317-8311 Telephone  
1-513-317-8311 Product Information number  
1-513-672-9633 Fax number  
1-513-317-8311 Emergency number

### 2. HAZARDS IDENTIFICATION

**Physical Hazards:** Not Classified

**Health Hazards:** Acute Toxicity, Oral Category 5  
Carcinogenicity, Category 1A  
Eye Damage/Irritation Category 2B  
Skin Corrosion/Irritation Category 3  
Specific Target Organ Toxicity-Repeated Exposure Category 1

**Signal Word:** DANGER

**Hazard Statement:** H303 May be harmful if swallowed  
H320 Causes eye irritation  
H316 Causes mild skin irritation  
H350 May cause cancer by inhalation

FLOC 20, 05, 60, 10, 30

H372 Causes damage to organs through prolonged or repeated exposure if inhaled

**GHS Symbol:**



GHS08

**Precautionary Statements**

**General:** P102 Keep out of reach of children

**Prevention:** P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P260 Do not breathe dust/fume/gas/mist/vapors/spray  
P264 Wash face, hands and any exposed skin thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P280 Wear protective gloves/protective clothing/eye protection/face protection

**Response:** P305+P338+P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing  
P308+P332+P337+P313 If eye irritation, skin irritation, rash or if exposed or Concerned: Get medical advice/attention  
P312 Call a POISON CENTER or doctor/physician if you feel unwell  
P314 Get medical advice/attention if you feel unwell

**Storage:** P405 Store locked up

**Disposal:** P501 Dispose of contents/container with compliance to federal, state and local regulations. Contact Innovative Turf Solutions LLC for proper disposal options

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Synonyms:** Water Treatment Application Formulation

**Formula:** Product Mixture

**FLOC 20, 05, 60, 10, 30**

<b>Component</b>	<b>CAS Number</b>	<b>Concentration %</b>
Bentonite	1302-78-9	60-100
Additive Package – Trade Secret		5-20
Crystalline Silica Quartz	14808-60-7	1-5
Crystalline Silica Cristobalite	14464-46-1	0.1-1
Crystalline Silica Tridymite	15468-32-3	0.1-1

#### **4. FIRST AID MEASURES**

##### **Eyes**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

##### **Inhalation**

If breathing difficulty exists, remove individual away into fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

##### **Skin**

Wash area repeatedly with soap and water. Get medical attention if irritation persists.

##### **Ingestion**

Under normal conditions, first aid procedures are not required

##### **Special Treatment**

Treat symptomatically

##### **Most important symptoms/effects, acute and delayed**

Repeated occurrence of breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

#### **5. FIREFIGHTING MEASURES**

##### **Suitable extinguishing media**

All standard firefighting media

##### **Specific hazards from combustion**

Not applicable

**FLOC 20, 05, 60, 10, 30**

### **Special protective equipment for fire-fighters**

Not applicable

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions and Protective equipment**

Personal Protection, see section 8. Avoid creating and breathing dust. Use appropriate protective equipment.

### **Emergency procedures**

For personal emergency procedures see section 4. For fire emergency procedures see section 5. Contain any spilled product and reuse if possible.

### **Environmental precautions**

None known

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

Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substance and use appropriate methods for collection, storage and disposal.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusting conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, or equivalent respirator when using this product. Material is slippery when wet.

### **Conditions for safe storage**

Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**OSHA Final: (TWA), (PEL):**

**FLOC 20, 05, 60, 10, 30**

No data available

**American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TWA): Crystalline Silica:**

Quartz 14808-60-7 - 0.05 mg/m<sup>3</sup>

Cristobalite 14464-46-1 – 0.05 mg/m<sup>3</sup>

Tridymite 15468-32-3 – 0.05 mg/m<sup>3</sup>

**Respiratory protection**

Not normally needed. If significant exposures are possible then the following respirator is recommended: Dust/mist respirator. (N95, P2/P3)

**Hand protection**

Normal work gloves.

**Eye protection**

Wear safety glasses or goggles to protect against exposure.

**Skin and body protection**

Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Various

**Physical state:** Solid

**Odor:** Odorless

**Specific gravity (H<sub>2</sub>O=1):** 2.65

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** No data available

**Flash point (C.O.C):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** No data available

**FLOC 20, 05, 60, 10, 30**

**Solubility in water:** Insoluble

**Percent volatile by volume:** No data available

**pH:** 4.0-8.0

**Evaporation rate:** Not determined

## 10. STABILITY AND REACTIVITY

**Reactivity:** Not expected to be reactive

**Chemical stability:** Stable

**Possibility of hazardous reactions:** Will not occur

**Conditions to avoid:** None anticipated

**Incompatible materials:** Hydrofluoric acid

**Hazardous decomposition products:** Amorphous silica may transform at elevated temperatures to tridymite (870°C) or cristobalite (1470°C)

## 11. TOXICOLOGICAL INFORMATION

**Principle Route of Exposure:** Eye or skin contact, inhalation.

### Acute inhalation toxicity:

Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridymite (IARC, Group 1). Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects.

**Eye Contact:** May cause mechanical irritation to eyes.

**Skin Contact:** May cause mechanical skin irritation.

**Ingestion:** None known

### Chronic Effects/Carcinogenicity:

Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

Cancer Status: The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 2A – possible carcinogenic to humans). Refer

**FLOC 20, 05, 60, 10, 30**

to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9<sup>th</sup> Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2). There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other internal organs) and kidney disease.

**Toxicology data for the components:** No data available

**Skin corrosion/irritation:** May cause irritation, allergic skin reaction.

**Eye damage/irritation:** May cause mechanical irritation of the eyes is possible

**Skin sensitization:** Not regarded as a sensitizer

**Respiratory sensitization:** Not regarded as a sensitizer

**Mutagenic Effects:** Not regarded as a mutagenic

**Reproductive toxicity:** No data available

**STOT single:** No data available

**STOT repeated exposure:** Damage to lungs by repeated or prolonged exposure if inhaled

## 12. ECOLOGICAL INFORMATION

**Biodegradability:** No data available

**Bioaccumulation:** No data available

**Toxicity to fish:** No data available

**Toxicity to invertebrates:** No data available

**Toxicity to algae:** No data available

**Toxicity to bacteria:** No data available

**FLOC 20, 05, 60, 10, 30**

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods:** Dispose of in a licensed landfill according to federal, state and local regulations.

**Contaminated Packaging:** Follow all applicable national or local regulations.

### 14. TRANSPORT INFORMATION

<b>UN number:</b>	Not regulated
<b>UN proper shipping name:</b>	Not regulated
<b>Transport hazard class:</b>	Not regulated
<b>Packing group:</b>	Not regulated
<b>Environmental hazards:</b>	Not regulated
<b>U.S. DOT Road/Rail/Waterways:</b>	Not regulated
<b>Transport Canada Road/Rail/Waterways:</b>	Not regulated
<b>International Maritime Dangerous Goods:</b>	Not regulated

### 15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

#### Federal Regulatory Status

##### Notification Status

**EINECS** All components listed

**DSL** All components listed

**TSCA** All components listed

##### SARA Section (313)

Not applicable

##### SARA Hazard Categories (311/312)

Chronic Health Hazard

**FLOC 20, 05, 60, 10, 30**



**Canadian WHMIS:** Not applicable

**State Regulatory Status**

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)**

The California Proposition 65 regulations apply to this product.

**NFPA Hazard Classification**

Health: 1  
Flammability: 0  
Reactivity: 0

**HMIS Classification**

Health: 1  
Flammability: 0  
Physical Hazards: 0  
Personal Protection: B



<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>PERSONAL PROTECTION</b>	<b>B</b>

**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate. Innovative Turf Solutions, LLC assumes no liability whatsoever for the accuracy or completeness of the information provided herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.