innovative turf so utions

Safety Data Sheet

Rev. Date: 06/10/15

1. PRODUCT AND COMPANY IDENTIFICATION

FLOC Socs 05

Waste Treatment Application Formulation

Product mixture

Product Code: FLOC Socs Clay-based flocculants

Innovative Turf Solutions, LLC

3318 Glenmont Lane Cincinnati, OH 45248

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

GHS Symbol:



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 medial advise/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

Component	CAS Number	Concentration %
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

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 Socs 05

No data available

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

Quartz 14808-60-7 - 0.05 mg/m³

Cristobalite 14464-46-1 - 0.05 mg/m³

Tridymite $15468-32-3 - 0.05 \text{ mg/m}^3$

Respiratory protection

Not normally needed. If significate 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 (H₂O=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

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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 crystobalite from occupational sources can cause lung cancer in humans (Group 2A – possible carcinogenic to humans). Refer

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 9th Report on Carcinogens (2000). The American Confrenec of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogens (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

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

UN number: Not regulated

UN proper shipping name: Not regulated

Transport hazard class: Not regulated

Packing group: Not regulated

Environmental hazards:Not regulated

U.S. DOT Road/Rail/Waterways: Not regulated

Transport Canada Road/Rail/Waterways: Not regulated

International Maritime Dangerous Goods: 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

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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 Health:
Flammability: 0 Flammability:
Reactivity: 0 Physical Hazards:
Personal Protection:



HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	В

1

0

0

В

HMIS Classification

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.