SAFETY DATA SHEET

1. Identification

Product identifier JONATHAN GREEN CRABGRASS & WEED PREVENTER

Other means of identification None

Recommended use Weed Control in Lawns

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Distributor

Company name JONATHAN GREEN & SONS, INC.

Address PO BOX 326

FARMINGDALE, NJ 07727

United States

Telephone Not available.

E-mail support@jonathangreen.com

Emergency phone number CHEMTREC 800-424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

Specific target organ toxicity, repeated Category 1

exposure

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause cancer. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Avoid release to the environment. Wear protective gloves/protective clothing/eye

protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

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

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

% of the mixture consists of component(s) of unknown long-term hazards to the aquatic

environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
BENTONITE		1302-78-9	20 - < 30
SILICA, AMORPHOUS HYDRATE	D	7631-86-9	20 - < 30
POTASH		7447-40-7	14

Chemical name	Common name and synonyms	CAS number	%
QUARTZ, RESPIRABLE FRACTION		14808-60-7	1-<3
Other components below repo	ortable levels		20- < 30

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur. Direct contact with eyes may cause temporary irritation. Most important

symptoms/effects, acute

and delayed

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation.

Symptoms may be delayed.

General information IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Material can be slippery when wet.

Fire fighting equipment/instructions Use water spray to cool unopened containers.

Specific methods General fire hazards Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Prevent product from entering drains. Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Following product recovery, flush area with water.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form	
QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.	

^{4.} First-aid measures

					~=-	4040	
US.	OSHA	Table	Z-3 (29	CFR	1910.	1000)

Components	Type	Value	Form
QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
SILICA, AMORPHOUS HYDRATED (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	
US. ACGIH Threshold Limit Values			
Components	Туре	Value	Form
QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
US. NIOSH: Pocket Guide to Chemical	Hazards		
Components	Туре	Value	Form
QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
SILICA, AMORPHOUS HYDRATED (CAS 7631-86-9)	TWA	6 mg/m3	

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica

should be monitored and controlled.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Wear suitable protective clothing. Other

Respiratory protection Use a particulate filter respirator for particulate concentrations exceeding

the Occupational Exposure Limit.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid. **Form** Solid.

Color Not available. Odor Not available. **Odor threshold** Not available. pН Not available.

Melting point/freezing point 1419.8 °F (771 °C) estimated Initial boiling point and boiling 2732 °F (1500 °C) estimated

range

Flash point Not available.

Material name: JONATHAN GREEN CRABGRASS & WEED PREVENTER

Evaporation rate Not available. Not available. Flammability (solid, gas)

Upper/lower flammability or explosive limits

(%)

Flammability limit - upper

Flammability limit - lower

(%)

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

0.00002 hPa estimated Vapor pressure

Not available.

Not available.

Vapor density Not available. Relative density Not available.

Solubility(ies)

Solubility (water) Not available. Not available. **Partition coefficient**

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature** Not available. **Viscosity**

Other information

Density 16.56 lbs/gal estimated

Not explosive. **Explosive properties** Not oxidizing. Oxidizing properties Specific gravity 1.98 estimated

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Contact with incompatible materials. Conditions to avoid

Incompatible materials Fluorine. Chlorine.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected. Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not available.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Serious eye

damage/eye irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization. Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1%

are mutagenic or genotoxic.

Carcinogenicity

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity

QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7) 1 Carcinogenic to humans.

SILICA, AMORPHOUS HYDRATED (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7) Cancer US. National Toxicology Program (NTP) Report on Carcinogens

QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7) Known To Be Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Aspiration hazard

Not classified.

Specific target organ toxicity -

Not classified.

repeated exposure

Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components **Species Test Results**

BENTONITE (CAS 1302-78-9)

Aquatic

Fish LC50 Rainbow trout, donaldson trout 19000 mg/l, 96 hours

(Oncorhynchus mykiss)

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not

allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and

the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

^{*} Estimates for product may be based on additional component data not shown. Persistence and degradability No data is available on the degradability of this product.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7) Cancer lung

effects

immune system effects

kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Carcinogenicity Classified hazard

Specific target organ toxicity (single or repeated exposure) categories

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

California Proposition 65



WARNING: WARNING: This product contains a chemical known to the State of California to cause cancer.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

QUARTZ, RESPIRABLE FRACTION (CAS Listed: October 1, 1988

14808-60-7)

4850 Version #: 01 Issue date: 12-21-2017

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7)

Material name: JONATHAN GREEN CRABGRASS & WEED PREVENTER

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No

EuropeEuropean List of Notified Chemical Substances (ELINCS)NoJapanInventory of Existing and New Chemical Substances (ENCS)NoKoreaExisting Chemicals List (ECL)YesNew ZealandNew Zealand InventoryNoPhilippinesPhilippine Inventory of Chemicals and Chemical SubstancesNo

PICCS)

Taiwan Toxic Chemical Substances (TCS)

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

No

16. Other information, including date of preparation or last revision

Issue date 12-21-2017

Version # 01

Disclaimer JONATHAN GREEN & SONS, INC. cannot anticipate all conditions under which this information

and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently

available.

Revision information Product and Company Identification: Product and Company Identification

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).