SAFETY DATA SHEET

1. Identification

Product identifier Jonathan Green Veri-Green Lawn Food 29-0-3

Other means of identification None

Recommended useLawn Fertilizer **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

exposure

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause cancer. Toxic to aquatic life. Toxic 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

Category 1

protection/face protection.

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

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

SDS US

environment.

3. Composition/information on ingredients

Material name: Jonathan Green Veri-Green Lawn Food

Mixtures

Chemical name	Common name and synonyms	CAS number	%
UREA		57-13-6	63.28
LIMESTONE (CALCIUM CARBONATE)		471-34-1	14.5
POTASH		7447-40-7	4.9
BENTONITE		1302-78-9	1 - < 3

Chemical name	Common name and synonyms	CAS number	%
SILICA, AMORPHOUS HYDRATED		7631-86-9	1-<3
QUARTZ, RESPIRABLE FRACTION		14808-60-7	< 1
Amorphous Silica (total Dust)		112926-00-8	< 0.3
Limestone (calcium Carbonate)		1317-65-3	< 0.3
Other components below reportable levels			10 - < 20

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

4. First-aid measures

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

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

This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. 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

Components	Туре	Value	Form
Limestone (calcium Carbonate) (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
LIMESTONE (CALCIUM CARBONATE) (CAS 471-34-1)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7)	PEL	15 mg/m3 0.05 mg/m3	Total dust. Respirable dust.
US. OSHA Table Z-3 (29 Cl Components	FR 1910.1000) Type	Value	Form
Amorphous Silica (total	TWA	0.8 mg/m3	
Dust) (CAS 112926-00-8) QUARTZ, RESPIRABLE FRACTION (CAS	TWA	20 mppcf 0.1 mg/m3	Respirable.
14808-60-7) SILICA, AMORPHOUS HYDRATED (CAS 7631-86-9)	TWA	2.4 mppcf 0.8 mg/m3	Respirable.
7031-00-9)		20 mppcf	
US. ACGIH Threshold Limit Components	it Values Type	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
Amorphous Silica (total Dust) (CAS 112926-00-8)	TWA	6 mg/m3	
Limestone (calcium Carbonate) (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
LIMESTONE (CALCIUM CARBONATE) (CAS 471-34-1)	TWA	10 mg/m3 5 mg/m3	Total Respirable.
QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.
SILICA, AMORPHOUS HYDRATED (CAS 7631-86-9)	TWA	6 mg/m3	
	ntal Exposure Level (WEEL) Guides	Value	Form
Components	Туре	Value	Form
UREA (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.
ogical limit values	No biological exposure limits noted for the ingred	ient(s).	
osure guidelines	Occupational exposure to nuisance dust (total silica should be monitored and controlled.	and respirable) and re	spirable crystalline

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.

Other Wear suitable protective clothing.

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. Solid. **Form**

Color Not available. Odor Not available. **Odor threshold** Not available. Hq Not available.

Melting point/freezing point 270.86 °F (132.7 °C) estimated

Initial boiling point and boiling Not available.

range

Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%)

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

0.00001 hPa estimated Vapor pressure

Vapor density Not available. Relative density Not available.

Solubility(ies)

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

(n-octanol/water)

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

Other information

Density 11.44 lbs/gal estimated

Explosive properties Not explosive. Oxidizing properties Not oxidizing. Specific gravity 1.37 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. Hazardous polymerization does not occur.

Possibility of hazardous

Conditions to avoid

reactions

Contact with incompatible materials.

Incompatible materials Acids. Fluorine.

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

Amorphous Silica (total Dust) (CAS 112926-00-8) 3 Not classifiable as to carcinogenicity to humans. 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)

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

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

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

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Test Results Species Components

BENTONITE (CAS 1302-78-9)

Aquatic

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

(Oncorhynchus mykiss)

LIMESTONE (CALCIUM CARBONATE) (CAS 471-34-1)

Aquatic

LC50 Western mosquitofish (Gambusia affinis) > 56000 mg/l, 96 hours Fish

UREA (CAS 57-13-6)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 3910 mg/l, 48 hours Fish LC50 Giant gourami (Colisa fasciata) 5 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

-2.11 **UREA**

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).

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

UN number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (UREA, POLYMER COATED

SULFUR COATED UREA - XCU)

Transport hazard class(es)

9 Class Subsidiary risk **Packing group** Ш **Environmental** Yes hazards ERG Code 9L

Special precautions for user Not available.

^{*} Estimates for product may be based on additional component data not shown.

Other information

Passenger and cargo aircraft Cargo aircraft only

Allowed with restrictions.

Allowed with restrictions.

IMDG

UN number UN3077

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (UREA, POLYMER

COATED SULFUR COATED UREA - XCU), MARINE POLLUTANT

Transport hazard class(es)

Class 9
Subsidiary risk Packing group III
Environmental hazards

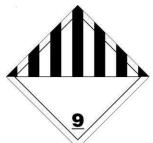
Marine pollutant Yes EmS F-A, S-F

Special precautions for user Transport in bulk according to Annex II of MARPOL 73/78 and the

Not available. Not applicable.

IBC Code

IATA; IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

US federal regulationsThis 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)

Not listed.

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

Material name: Jonathan Green Veri-Green Lawn Food 4855 Version #: 01 Issue date: 12-21-2017

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Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Yes

Classified hazard Carcinogenicity

categories Specific target organ toxicity (single or repeated exposure)

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)

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)

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
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Toxic Chemical Substances (TCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

^{*}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).

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.