

NOTICE OF PESTICIDE APPLICATION

For further information regarding this notice please contact the IPM Coordinator for Northern Highlands:

Jamie Atchison

Name

Phone Number: (201) 327 8700 x571

The following pesticides will be used at:

Pesticide Common Name Allectus	Pesticide Trade Name Imidacloprid Bifenthrin	EPA Registration Number 432-1427-961
Pesticide Common Name Q4	Pesticide Trade Name Quinclorac	EPA Registration Number 2217-930

The Office of Pesticide Programs of the United States Environmental Protection Agency has stated: "Where possible, persons who potentially are sensitive, such as pregnant women, infants, and children, should avoid any unnecessary pesticide exposure."

Location of the pesticide application: School Grounds

Reason for the pesticide application: To control grassy weeds and prevent chinch bug & Grub damage

If an indoor application the date and time it is planned:

DATE _____ TIME _____

In the case of an outdoor application, 3 dates must be listed, in chronological order, on which the outdoor application may take place if the preceding date is canceled.

DATE 8/8/2019 DATE 8/9/2019 DATE 8/10/2018

Description of the possible adverse effects of the pesticides as per the Material Safety Data Sheets for the pesticides to be used, if available:

May cause mild irritation to skin and eyes. Ingestion of large amounts may cause gastrointestinal disorder, nausea, vomiting, diarrhea, or pain in the abdomen. Inhalation may cause moderate irritating to the mucous membranes. Inhalation of sprays may cause burning sensations in the respiratory tract, resulting in coughing

Pesticide(s) product-label instructions and precautions related to Public Safety:

Causes minor eye injury (irritation). Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating drinking, chewing gum, or using tobacco. Remove contaminated clothing before reuse. Prolonged or frequently repeated skin contact while handling the material may cause allergic reactions in some individuals

Notification of the Use of Pesticides

(This notice should be received at least 72 hours prior to pesticide use)

Date: 8/6/19

To: Parents/guardians of students, and staff of Northern Highlands High School.

From: The School IPM Coordinator: Jamie Atchison Phone Number: (201) 327 8700 x571

This notice is to advise you that the following pesticides will be used at:

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Pesticide product label instructions and precautions related to Public Safety.

Causes minor eye injury (irritation). Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing before reuse. Prolonged or frequently repeated skin contact while handling the material may cause allergic reactions in some individuals.

Note: as required by law, we are advising you of the following statement:

*The Office of Pesticide Programs of the United States Environmental Protection Agency has stated:
"Where possible, persons who potentially are sensitive, such as pregnant women, infants, and children, should avoid any unnecessary pesticide exposure."*

1. Product and Company Identification

Product Code:	901961	
Product Name:	Allectus 0.225G 17-0-6 40%XCU 3FE	
Company Name:	Turf Care Supply Corp.	Phone Number:
	50 Pearl Road	1 (330)558-0910
	Suite 200	
	Brunswick, OH 44212	
Web site address:	www.turfcare.com	
Email address:	regaffairs@tcscusa.com	
Emergency Contact:	PERS	1 (800)633-8253
Information:	Turf Care Supply Corp.	1 (330)558-0910
Synonyms:	Fertilizer with Insecticide.	

2. Hazards Identification

Acute Toxicity: Oral, Category 4
 Skin Corrosion/Irritation, Category 2
 Serious Eye Damage/Eye Irritation, Category 1
 Carcinogenicity, Category 1A
 Specific Target Organ Toxicity (single exposure), Category 1
 Specific Target Organ Toxicity (repeated exposure), Category 1
 Aquatic Toxicity (Acute), Category 3
 Aquatic Toxicity (Chronic), Category 3



GHS Signal Word:	Danger
GHS Hazard Phrases:	Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause cancer state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard. Causes damage to organs Causes damage to organs through prolonged or repeated exposure. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.
GHS Precaution Phrases:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear appropriate personal protective equipment.
GHS Response Phrases:	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or doctor/physician. IF exposed or concerned: Get medical attention/advice. Rinse mouth. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal Phrases:	Store locked up. Dispose of contents/container to an appropriate disposal facility.
Potential Health Effects (Acute and Chronic):	Chronic: Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated exposure may cause permanent eye damage. Chronic exposure may cause lung damage. Effects may be delayed.
Inhalation:	May be harmful if inhaled. Low hazard for normal industrial handling. The toxicological properties of this substance have not been fully investigated. May cause systemic effects. Material may be irritating to mucous membranes and upper respiratory tract.
Skin Contact:	May cause skin irritation. Dust causes mechanical irritation. Low hazard for usual industrial handling.
Eye Contact:	May cause eye irritation. Dust may cause mechanical irritation.
Ingestion:	May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Low hazard for normal industrial handling. The toxicological properties of this substance have not been fully investigated. May cause systemic effects.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
1317-65-3	Limestone	40.01 %
57-13-6	Urea	36.94 %
7447-40-7	Potassium chloride	9.58 %
8047-67-4	Saccharated iron oxide	3.401 %
14808-60-7	Quartz	1.512 %
138261-41-3	Imidacloprid	0.125 %
82657-04-3	Bifenthrin	0.100 %

4. First Aid Measures

Emergency and First Aid

Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

In Case of Skin Contact: Get medical aid if irritation develops or persists. In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse. Wash off with soap and plenty of water.

In Case of Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Do NOT allow victim to rub eyes or keep eyes closed.

In Case of Ingestion: Get medical aid. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Signs and Symptoms Of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt:	No data.
Explosive Limits:	LEL: No data. UEL: No data.
Autoignition Pt:	No data.
Suitable Extinguishing Media:	For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.
Fire Fighting Instructions:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible. Decomposes at high temperatures, resulting in toxic and corrosive products. Runoff from fire control or dilution water may cause pollution.
Flammable Properties and Hazards:	Most of the components of this product are non-combustible. However, a portion of them may support combustion at elevated temperatures.
Hazardous Combustion Products:	Thermal decomposition may result in the production of ammonia, formaldehyde, biuret, chlorine, cyanic acid, and cyanide, and oxides of carbon, nitrogen, phosphorus, potassium, sulfur, and chlorine, and oxides of alkaline earth metals, and certain heavier metals used as nutrients in fertilizer products, such as copper, iron, manganese, and zinc, and other toxic and irritating fumes and gases.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:	<p>Use proper personal protective equipment as indicated in Section 8.</p> <p>Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Avoid runoff into storm sewers and ditches which lead to waterways. Do not let this product enter the environment except as directed on product label. Clean up spills immediately, observing precautions in the Protective Equipment section.</p> <p>Personal precautions. Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.</p> <p>Environmental precautions. Do not let product enter drains.</p> <p>Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.</p> <p>PROCEDURES & PERSONAL PRECAUTIONS. Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.</p> <p>Methods for cleaning up. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.</p>
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7. Handling and Storage

Precautions To Be Taken in Handling:	<p>Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Use only in a well-ventilated area. Keep container tightly closed. Wash clothing before reuse.</p> <p>Provide appropriate exhaust ventilation at places where dust is formed.</p>
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Precautions To Be Taken in Storing: Store in a cool, dry place. Keep container closed when not in use.

Other Precautions: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or by disposal of wastes, including equipment wash water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Apply this product as specified on the label.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1317-65-3	Limestone	PEL: 15 (dust); 5 (resp.) mg/m3	No data.	No data.
57-13-6	Urea	No data.	No data.	No data.
7447-40-7	Potassium chloride	No data.	No data.	No data.
8047-67-4	Saccharated iron oxide	No data.	No data.	No data.
14808-60-7	Quartz	PEL: 8825 ppm/(%SiO2+5)	TLV: 0.05 mg/m3 (R)	No data.
138261-41-3	Imidacloprid	PEL: 5 mg/m3	TLV: 10 mg/m3	No data.
82657-04-3	Bifenthrin	No data.	No data.	No data.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Wash and dry hands.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States:	[] Gas [] Liquid [X] Solid	
Appearance and Odor:	Multi-colored, granular solid. Characteristic pesticide solvent odor.	
Melting Point:	No data.	
Boiling Point:	No data.	
Flash Pt:	No data.	
Evaporation Rate:	No data.	
Flammability (solid, gas):	No data available.	
Explosive Limits:	LEL: No data.	UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.	
Vapor Density (vs. Air = 1):	No data.	
Specific Gravity (Water = 1):	No data.	
Bulk density:	~ 45 - 65 LB/CF	
Solubility in Water:	No data.	
Percent Volatile:	No data.	
Autoignition Pt:	No data.	

10. Stability and Reactivity

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Incompatible materials, dust generation, heating to decomposition. High temperatures.
Incompatibility - Materials To Avoid:	Strong oxidizing agents, bases, acids, aluminum.
Hazardous Decomposition or Byproducts:	The decomposition of fertilizer products may result in the generation of some or all of the following: ammonia, formaldehyde, biuret, chlorine, cyanic acid, and cyanide, and oxides of carbon, nitrogen, phosphorus, potassium, sulfur, and chlorine, and oxides of alkaline earth metals, and certain heavier metals used as nutrients in fertilizer products, such as copper, iron, manganese, and zinc, and other irritating and toxic fumes and gases.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information: Epidemiology: No information found.
 Teratogenicity: Teratogenic effects have occurred in experimental animals.
 Neurotoxic effects have occurred in experimental animals.
 Reproductive toxicity - no data available.
 Inhalation: May cause damage to organs through prolonged or repeated exposure.

CAS# 57-13-6: Urea:

Other Studies:, TClO, Inhalation, Rat, 288.0 MG/M3, 17 W; Gigiena Truda i Professional'nye Zabolevaniya.(Labor Hygiene and Occupational Disease), V/O Mezhdunarodnaya Kniga, Moscow 113095 Russia, Vol/p/yr: 30(3),43, 1986

Acute toxicity, LD50, Oral, Rat, 8471. MG/KG; Gigiena i Sanitariya, Mezhdunarodnaya Kniga, ul. B. Yakimanka, 39, 113095, Moscow 113095 Russia, Vol/p/yr: 51(6),8, 1986

Standard Draize Test, Skin, Human, 22.00 MG, 3 D; Cutaneous Toxicity, Proceedings of the 3rd Conference, 1976, D, V.A., and P. L, New York, Academic Press, Inc., London United Kingdom, Vol/p/yr: -,127, 1977

CAS# 7447-40-7: Potassium chloride:

Acute toxicity, LD50, Oral, Rat, 2600. MG/KG; "Sbornik Vysledku Toxixologickeho Vysetreni Latek A Pripravku," , Institut Pro Vychovu Vedoucicn P, Marhold, J.V., Institut Pro Vychovu Vedoucicn, Pracovniku Chemickeho, Prumyclu Praha Czechoslovakia, Vol/p/yr: -,8, 1972

Standard Draize Test, Eyes, Species: Rabbit, 500.0 MG, 24 H; "Sbornik Vysledku Toxixologickeho Vysetreni Latek A Pripravku," , Institut Pro Vychovu Vedoucicn P, Marhold, J.V., Institut Pro Vychovu Vedoucicn, Pracovniku Chemickeho, Prumyclu Praha Czechoslovakia, Vol/p/yr: -,8, 1972

CAS# 138261-41-3: Imidacloprid:

Acute toxicity, LD50, Oral, Rat, 410.0 MG/KG; Agrochemicals Japan., Japan Plant Protection Association, 1-43-11, Komagome, Toshima-ku, Tokyo 170 Japan, Vol/p/yr: (63),15, 1993

Acute toxicity, LD50, Skin, Rat, > 5.000 GM/KG; Agrochemicals Japan., Japan Plant Protection Association, 1-43-11, Komagome, Toshima-ku, Tokyo 170 Japan, Vol/p/yr: (63),15, 1993

Acute toxicity, LD50, Oral, Mouse, 98.00 MG/KG; Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan., Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170 Japan, Vol/p/yr: 19,S209, 1994

CAS# 82657-04-3: Bifenthrin:

Acute toxicity, LD50, Oral, Rat, 54500. UG/KG; Pesticide Manual., The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG UK, Vol/p/yr: 9,73, 1991

Acute toxicity, LD50, Skin, Species: Rabbit, > 2.000 GM/KG; Pesticide Manual., The

British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG UK, Vol/p/yr: 9,73, 1991

Carcinogenicity/Other Information:

This material may contain small amounts of respirable crystalline and amorphous silica. The International Agency for Cancer Research (IARC) has classified crystalline silica as a carcinogen to humans (Group 1), and amorphous silica as not classifiable as to its carcinogenicity to humans (Group 3). See "Silica, Some Silicates, Coal dust and para-Aramid Fibrils in IARC Monographs on the Evaluation of Carcinogenic Risks to Humans", (Vol. 68).

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
1317-65-3	Limestone	n.a.	n.a.	n.a.	n.a.
57-13-6	Urea	n.a.	n.a.	n.a.	n.a.
7447-40-7	Potassium chloride	n.a.	n.a.	n.a.	n.a.
8047-67-4	Saccharated iron oxide	n.a.	3	n.a.	n.a.
14808-60-7	Quartz	Known	1	A2	n.a.
138261-41-3	Imidacloprid	n.a.	n.a.	n.a.	n.a.
82657-04-3	Bifenthrin	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information:

Environmental: If released to the atmosphere, urea will degrade rapidly in the vapor-phase by reaction with photochemically produced hydroxyl radicals (half-life of 9.6 hr). If released to soil, urea is hydrolyzed to ammonium through soil urease activity (the basis of its use as a fertilizer). The rate of hydrolysis can be fast (24 hr); however, a number a variables (such as increasing the pellet size of the fertilizer) can decrease the degradation rate from days to weeks.

Oral LD50 values for bees range from 3.7 to 40.9 ng per bee, and contact toxicity values ranged from 59.7 to 242.6 ng per bee. Based on these values, imidacloprid is considered to be highly toxic to bees. (Schmuck, R.; Schoning, R.; Stork, A.; Schramel, O. Risk posed to honeybees (*Apis mellifera* L, Hymenoptera) by an imidacloprid seed dressing of sunflowers. *Pest Manag. Sci.* 2001, 57, 225-238, and Suchail, S.; Guez, D.; Belzunces, L. P. Discrepancy between Acute and Chronic Toxicity Induced by Imidacloprid and its Metabolites in *Apis mellifera*. *Environ. Toxicol. Chem.* 2001, 20 (11), 2482-2486.)

CAS# 57-13-6: Urea:

Lethal concentration to 0% of test organisms., Creek Chub (*Semotilus atromaculatus*), 16000000. UG/L, 24 H, Mortality, Water temperature: 15.00 C - 21.00 C C, pH: 8.30, Hardness: 98.00 MG/L; Appraisal of a Chemical Waste Problem by Fish Toxicity Tests, Gillette, L.A., D.L. Miller, and H.E. Redman, 1952

CAS# 7447-40-7: Potassium chloride:

LC50, Brine Shrimp (*Artemia salina*), 70600. UMOL/L, 24 H, Mortality; Comparative Acute Toxicity of the First 50 Multicentre Evaluation of In Vitro Cytotoxicity Chemicals to Aquatic Non-vertebrates, Calleja, M.C., G. Persoone, and P. Geladi, 1994

LC50, Crayfish (*Austropotamobius pallipes* ssp. *pall*), 390000. UG/L, 96 H, Mortality, Water temperature: 15.00 C - 17.00 C C, pH: 7.00; Specific Toxic Properties of Metallic Salts in *Austro-potamobius pallipes pallipes* and *Orconectes limosus* (*Proprietes*

Toxiques Specificques des sels Metalliques chez Austropotamobius pallipes pallipes et Orconectes limosu, Boutet, C., and C. Chaisemartin, 1973

CAS# 138261-41-3: Imidacloprid:

LC50, Rainbow Trout (Oncorhynchus mykiss), 83.00 PPM, 96 H, Mortality; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

LC50, Rainbow Trout (Oncorhynchus mykiss), 229.1 PPM, 96 H, Mortality; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

LC50, Brine Shrimp (Artemia sp.), nauplii, 361230. UG/L, 48 H, Mortality, Water temperature: 27.00 C C; Comparative Toxicity of Four Insecticides, Including Imidacloprid and Tebufenozide, to Four Aquatic Arthropods, Song, M.Y., J.D. Stark, and J.J. Brown, 1997

CAS# 82657-04-3: Bifenthrin:

LC50, Rainbow Trout (Oncorhynchus mykiss), 0.150 PPB, 96 H, Mortality; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

Bifenthrin: Log (Kow) = 6.4 (Thurston County Health Department - 412 Lilly Road NE, Olympia WA 98506)

Imidacloprid: Log (Kow) = 0.57 (Thurston County Health Department - 412 Lilly Road NE, Olympia WA 98506)

Mobility in Soil:

No data available.

13. Disposal Considerations

Waste Disposal Method:

If material cannot be completely used according to label directions, dispose of container and contents according to this section.

Contact a licensed professional waste disposal service to dispose of this material.

Do not empty into drains.

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Observe all federal, state, and local environmental regulations.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.
DOT Hazard Class:
UN/NA Number:

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1317-65-3	Limestone	No	No	No
57-13-6	Urea	No	No	No
7447-40-7	Potassium chloride	No	No	No
8047-67-4	Saccharated iron oxide	No	No	No
14808-60-7	Quartz	No	No	No
138261-41-3	Imidacloprid	No	No	No
82657-04-3	Bifenthrin	No	No	Yes

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Acute (immediate) Health Hazard
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Chronic (delayed) Health Hazard
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Fire Hazard
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Sudden Release of Pressure Hazard
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Reactive Hazard

Regulatory Information:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels on non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

KEEP OUT OF REACH OF CHILDREN. CAUTION.

For **MEDICAL** and **TRANSPORTATION EMERGENCIES ONLY** Call, 24 Hours A Day, 1-800-334-7577. For **PRODUCT USE** Information Call 1-800-331-2867.

FIRST AID

If on skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

If in eyes:

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of emergency call toll free the Bayer Environmental Science Emergency Response Telephone No. 1-800-334-7577.

NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.

This product contains a pyrethroid. If large amounts have been ingested, milk, cream

and other digestible fats and oils may increase absorption and so should be avoided.

PRECAUTIONARY STATEMENTS.
HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

CAUTION: Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish and aquatic invertebrates. Run-off may be hazardous to aquatic organisms in water adjacent to treated areas. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Sweeping any product that lands on a driveway, sidewalk, or street, back onto the treated area of the lawn or garden will help to prevent run off to water bodies or drainage systems.

This product contains a chemical with properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

16. Other Information

Revision Date: 04/28/2015

Hazard Rating System:



Additional Information About No data available.

This Product:

Company Policy or Disclaimer:

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and Turf Care Supply Corp. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purposes.

Issue Date 24-Nov-2014

Revision Date 07-Jan-2015

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Q4® Plus Turf Herbicide for Grassy & Broadleaf Weeds

Other means of identification

Product Code PBI FP 697-6

EPA Pesticide Registration Number 2217-930

Recommended use of the chemical and restrictions on use

Recommended Use Herbicide.

Uses advised against No information available.

Details of the supplier of the safety data sheet

Supplier
PBI Gordon Corporation
1217 West 12th Street
Kansas City, MO 64101

Manufacturer
PBI Gordon Corporation
1217 West 12th Street
Kansas City, MO 64101

Company Name
PBI Gordon Corporation
1217 West 12th Street
Kansas City, MO 64101

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Gases)	Category 4
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1

The International Agency for Research on Cancer (IARC) lists chlorophenoxy herbicides in its Group 2B (limited evidence for Carcinogenicity in humans.) The US EPA has given the chlorophenoxy Herbicides 2,4-D, 2,4-DP, MCPP, and MCPA a Class D classification (not classifiable as to human carcinogenicity.) More current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic effects and a recent World Health Organization (WHO) review of 2,4-D toxicology has concluded that 2,4-D is not a carcinogen.

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if inhaled. Causes eye irritation. May cause an allergic skin reaction.



Appearance Liquid

Physical state Liquid

Odor Musty

Precautionary Statements - Prevention

- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Wear protective gloves/protective clothing/eye protection/face protection
- Contaminated work clothing should not be allowed out of the workplace
- Keep container tightly closed

Precautionary Statements - Response

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage

- Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

- Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Have the product label with you when calling a poison control center or doctor or going in for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.

The low flash point of this product is due to a minor component in the mixture. Based on independent laboratory testing of similar products, this product would not sustain combustion as specified in DOT Regulation 49 CFR 173 Appendix H; however OSHA HCS 2012 flammable classifications are solely based on tested mixture flash points and boiling points.

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
2,4-D, dimethylamine salt	2008-39-1	11.81
8-Quinolinecarboxylic acid, 3,7-dichloro-	84087-01-4	8.43
Trade Secret	Proprietary	0-10*
Dimethylamine dicamba	2300-66-5	1.49
Sulfentrazone	122836-35-5	0.69

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

General advice	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is not required. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization of susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray (fog). Foam. Dry chemical.

Specific hazards arising from the chemical

In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers.

Incompatible materials

Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2,4-D, dimethylamine salt 2008-39-1	TWA: 10 mg/m ³ inhalable fraction S*	TWA: 10 mg/m ³	IDLH: 10 mg/m ³ , TWA: 10 mg/m ³
Trade Secret	STEL: 15 ppm TWA: 5 ppm	TWA: 10 ppm TWA: 18 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 18 mg/m ³	IDLH: 500 ppm TWA: 10 ppm TWA: 18 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls

No information available.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles. Face protection shield.

Skin and body protection

Wear protective gloves and protective clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Musty
Appearance	Liquid	Odor threshold	No information available
Color	Brown		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	Not Available		
Melting point/freezing point	<35 °F		
Boiling point / boiling range	100 °C / 212 °F		
Flash point	59 °C / 138 °F		
Evaporation rate	< 1		Pensky-Martens Closed Cup (PMCC)
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	<17 mm Hg		
Vapor density	>1		
Specific Gravity	1.0951		
Water solubility	Soluble in water		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Oxidizing properties	No information available		

Other Information

Density 9.12 pounds/gallon

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Will not occur.

Conditions to avoid

Keep from freezing.

Incompatible materials

Acids.

Hazardous Decomposition Products

May emit toxic fumes under fire conditions. Hydrogen chloride. Nitrogen oxides (NOx). Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Irritant, moderate respiratory.

Eye contact Mild eye irritation.

Skin Contact Moderate skin irritation.

Ingestion May cause irritation.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Trade Secret	= 698 mg/kg (Rat)	= 3900 mg/kg (Rat)	= 4540 ppm (Rat) 6 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Chronic toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.

Target Organ Effects Eyes, Respiratory system, Skin.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 2% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	3373 mg/kg
ATEmix (dermal)	68003 mg/kg
ATEmix (inhalation-gas)	18135 mg/L
ATEmix (inhalation-dust/mist)	38.9 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

11% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade Secret	9: 96 h Pseudokirchneriella subcapitata mg/L EC50	111 - 125: 96 h Oncorhynchus mykiss mg/L LC50 static 120: 96 h Oncorhynchus mykiss mg/L LC50 static 210: 96 h Poecilia reticulata mg/L LC50 static 127 - 349: 96 h Poecilia reticulata mg/L LC50 semi-static 396: 96 h Brachydanio rerio mg/L LC50 static	EC50 = 26.8 mg/L 15 min	88.7: 48 h Daphnia magna Straus mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container, unless specified by the manufacturer.
US EPA Waste Number	U240 See Section 2: Hazards not otherwise classified (HNOC)

14. TRANSPORT INFORMATION

DOT

Proper shipping name	For package sizes less than 113 gallons: product is non-regulated. For package sizes 113 gallons or greater: UN3082, Environmentally Hazardous Substances, Liquid, N.O.S., 9, PGIII, RQ (2,4-D)
Description	The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept. PESTICIDES, NOI, INCLUDING DEFOLIANTS, FUNGICIDES, HERBICIDES, OR INSECTICIDES NMFC 155050-6 If shipped in bulk containers (greater than 119 gallons), this product is a Marine Pollutant. When shipped as a Hazardous Material, label required is Class 9 (Miscellaneous). Placards required on bulk shipments only.

15. REGULATORY INFORMATION

U.S. EPA Label Information

EPA Pesticide Registration Number 2217-930

Federal Insecticide, Fungicide, Rodenticide Act Regulations

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

Caution. Keep out of the reach of children. Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed.

International Inventories

TSCA	Not Listed
DSL/NDL	Not Listed
EINECS/ELINCS	Not Listed
ENCS	Not Listed
IECSC	Not Listed
KECL	Not Listed
PICCS	Not Listed
AICS	Not Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
2,4-D, dimethylamine salt				X			X		X	X
8-Quinolincarboxylic acid, 3,7-dichloro- Trade Secret	X	X		X	X	X	X	X	X	X
Dimethylamine dicamba				X		X				X

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Trade Secret -		0-10*	1.0
Dimethylamine dicamba - 2300-66-5	2300-66-5	1.49	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Trade Secret	1000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
2,4-D, dimethylamine salt 2008-39-1	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
Trade Secret	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Trade Secret	X	X	X
Dimethylamine dicamba 2300-66-5	X		

International Regulations

Mexico - Grade

Moderate risk, Grade 2

Chemical Name	Carcinogenicity	Exposure Limits
Trade Secret		Mexico: TWA 10 ppm Mexico: TWA 18 mg/m ³

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection X

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End of Safety Data Sheet