

1. Product and Company Identification

Product Code: 902612
Product Name: ALLECTUS 0.225 G 15-0-0 40%ALL-N
Trade Name: Fertilizer with Pesticide
Company Name: Turf Care Supply Corp. **Phone Number:**
 50 Pearl Road 1 (330)558-0910
 Suite 200
 Brunswick, OH 44212
Web site address: www.turfcaresupply.com
Email address: regaffairs@tcscusa.com
Emergency Contact: PERS 1 (800)633-8253
Information: Turf Care Supply Corp. 1 (330)558-0910

2. Hazards Identification

Acute Toxicity: Oral, Category 4

Acute Toxicity: Skin, Category 4



GHS Signal Word: Warning

GHS Hazard Phrases: H315 - Causes skin irritation.
 H319 - Causes serious eye irritation.
 H335 - May cause respiratory irritation. H373 - May cause damage to through prolonged or repeated exposure.

GHS Precaution Phrases: P261 - Avoid breathing dust.
 P280 - Wear personal protective equipment.

GHS Response Phrases: P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P330 - Rinse mouth.
 P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation persists, get medical advice/attention.
 P332+313 - If skin irritation occurs, get medical advice/attention.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

GHS Storage and Disposal Phrases: Store in a diked or contained area to prevent uncontrolled release to the environment.
 P403+235 - Store in cool/well-ventilated place.

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	63.00 %
57-13-6	Urea	32.56 %
14808-60-7	Quartz	2.100 %
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. Do NOT induce vomiting. 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: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. 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: No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:

Use proper personal protective equipment as indicated in Section 8.
 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.

Personal precautions.
 Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions.
 Do not let product enter drains.

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

PROCEDURES & PERSONAL PRECAUTIONS.
 Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

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.

7. Handling and Storage

Precautions To Be Taken in Handling:

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.

Provide appropriate exhaust ventilation at places where dust is formed.

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.
14808-60-7	Quartz	PEL: 15 (dust); 5 (resp.) mg/m3	No data.	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:	[<input type="checkbox"/>] Gas [<input type="checkbox"/>] Liquid [<input checked="" type="checkbox"/>] Solid	
Appearance and Odor:	Multi-colored. Granular Solid. ammonia-like.	
Melting Point:	No data.	
Boiling Point:	No data.	
Decomposition Temperature:	~ 130.0 C - 135.0 C	
Autoignition Pt:	No data.	
Flash Pt:	No data.	
Explosive Limits:	LEL: No data.	UEL: No data.
Specific Gravity (Water = 1):	No data.	
Bulk density:	~ 45 - 65 LB/CF	
Vapor Pressure (vs. Air or mm Hg):	No data.	
Vapor Density (vs. Air = 1):	No data.	
Evaporation Rate:	No data.	
Solubility in Water:	No data.	
pH:	~ 6 - 8	
Percent Volatile:	No data.	

10. Stability and Reactivity

Stability:	Unstable [<input type="checkbox"/>] Stable [<input checked="" type="checkbox"/>]
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:	Carbon monoxide, oxides of nitrogen, Carbon dioxide, oxides of sulfur, nitrogen oxides (NOx) and ammonia (NH3). Nitrogen oxides, oxides of phosphorus, Ammonia, Oxides of potassium, Hydrogen chloride, chlorine, irritating and toxic fumes and gases.
Possibility of Hazardous Reactions:	Will occur [<input type="checkbox"/>] Will not occur [<input checked="" type="checkbox"/>]

Conditions To Avoid - No data available.
Hazardous Reactions:

11. Toxicological Information

Toxicological Information: Teratogenicity: Teratogenic effects have occurred in experimental animals.
Neurotoxic effects have occurred in experimental animals.
Inhalation: May cause damage to organs through prolonged or repeated exposure.

Oral - Imidacloprid
Imidacloprid is moderately toxic if ingested. Oral LD50 values in rats were estimated to be 450 mg/kg for both sexes in one study and 500 and 380 mg/kg in males and females, respectively in another study. In mice, LD50 values were estimated at 130 mg/kg for males and 170 mg/kg for females.

Dermal - Imidacloprid
Imidacloprid is very low in toxicity via dermal exposure. The dermal LD50 in rats was estimated at greater than 5000 mg/kg. Researchers did not observe eye or skin irritation in rabbits. Imidacloprid is not considered a skin sensitizer, although reports of hypersensitivity in skin following exposure to imidacloprid have been reported in companion animals.

Inhalation - Imidacloprid
Imidacloprid is variable in toxicity if inhaled. The inhalation LC50 was estimated to be greater than 5323 mg/m³ for dust and 69 mg/m³ for aerosol exposure in rats. Imidacloprid dust is considered slightly toxic but the aerosol form is highly toxic.

Portions of the above are adapted from the Imidacloprid Technical Fact Sheet of the National Pesticide Information Center.

Oral - Bifenthrin
Bifenthrin is moderately toxic to rats when ingested, with an acute oral LD50 ranging from 53.4 mg/kg to 210.4 mg/kg.

Dermal - Bifenthrin
Bifenthrin is low in toxicity when applied to the skin of rats and rabbits. The acute dermal LD50 was greater than 2000 mg/kg after a 24 hour exposure to bifenthrin. Bifenthrin was non-irritating when applied to the skin of rabbits and practically non-irritating to the eyes of rabbits. Bifenthrin did not cause skin sensitization when applied to the skin of guinea pigs according to the Buehler method. When bifenthrin was administered to guinea pigs according to the maximization method, skin sensitization occurred.

Inhalation - Bifenthrin
Bifenthrin is low in toxicity to rats when inhaled, with an acute inhalation LD50 ranging from 0.8 mg/L to 1.10 mg/L.

Portions of the above are adapted from the Bifenthrin Technical Fact Sheet of the National Pesticide Information Center.

CAS# 57-13-6:
Other Studies:, TCLo, Inhalation, Rat, 288.0 MG/M³, 17 W.

Result:
Liver: Other changes.
Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: True cholinesterase.
Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: Transaminases.
- 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.
Result:
Maternal Effects: Postpartum effects.
Effects on Newborn: Biochemical and metabolic.
- 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.
Result:
Behavioral: Irritability.
- 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

Carcinogenicity/Other Information:

Carcinogenicity.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity:

NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information:

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. 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). 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.

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 of variables (such as increasing the pellet size of the fertilizer) can decrease the degradation rate from days to weeks.

Birds - Imidacloprid

The acute LD50 for birds varies by species; it was determined to be 31 mg/kg in Japanese quail but 152 mg/kg in bobwhite quail. However, dietary LC50 values for a five-day interval were 2225 mg/kg/day for bobwhite quail and in excess of 5000 mg/kg for mallard ducks.

Fish and Aquatic Life - Imidacloprid

LC50 values for a 96-hour exposure were 237 mg/L for golden orfe (*Leuciscus idus*) and 21 mg/L for rainbow trout (*Oncorhynchus mykiss*). Researchers determined LC50 values of 85 mg/L for *Daphnia* with a 48-hour exposure.

Terrestrial Invertebrates - Imidacloprid

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. Colonies of bees (*Apis mellifera*) appeared to vary in their sensitivity to imidacloprid, perhaps due to differences in oxidative metabolism among colonies. The 5-hydroxyimidacloprid and olefin metabolites were more toxic to honeybees than the parent compound.

Portions of the above are adapted from the Imidacloprid Technical Fact Sheet of the National Pesticide Information Center.

CAS# 57-13-6:

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.

Result:

Behavioral Effects.

- Appraisal of a Chemical Waste Problem by Fish Toxicity Tests, Gillette, L.A., D.L. Miller, and H.E. Redman, 1952

13. Disposal Considerations

Waste Disposal Method:

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

14. Transport Information

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed
 Acute Toxicity: Skin, Category 4 - Warning! Harmful in contact with skin

LAND TRANSPORT (US DOT):

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

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Environmentally Hazardous Substance, solid, n.o.s. (Bifenthrin Mixture)
UN Number: 3077 **Packing Group:** III
Hazard Class: 9 - CLASS 9 **IMDG MFRAG Number:**
IMDG EMS Page: **Marine Pollutant:** Yes

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
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:

Yes No Acute (immediate) Health Hazard
 Yes No Chronic (delayed) Health Hazard
 Yes No Fire Hazard
 Yes No Sudden Release of Pressure Hazard
 Yes 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.

CAUTION. KEEP OUT OF REACH OF CHILDREN.

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.

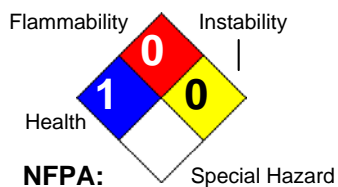
16. Other Information

Revision Date: 06/20/2013

Hazard Rating System:

HEALTH		1
FLAMMABILITY		0
PHYSICAL		0
PPE		

HMIS:



Additional Information About No data available.

This Product: