Material Safety Data Sheet

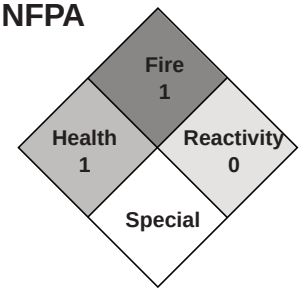
Product Name: Zylam 20SG Systemic Turf Insecticide

MSDS No.: 514-6 **Version No.: 001** **EPA Registration No.: 2217-935**

1. Basic Information:

Manufacturer:	PBI/Gordon Corporation
Address:	1217 West 12th Street
City, State, Zip:	Kansas City, MO 64101-1407
Contact:	Environmental, Health & Safety Dept.
Information Telephone Number:	(816) 421-4070
Emergency Contact:	Chemtrec
Emergency Telephone Number:	(800) 424-9300
Last Update:	5/10/2010
Chemical State:	☐ Liquid ☐ Gas ☒ Solid
Chemical Type:	☐ Pure ☒ Mixture

NFPA



1	Health
1	Flammability
0	Reactivity
B	Pers. Protection

2. Ingredients:

☐ **Trade Secret** ***(ND = Not Disclosed)***

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
165252700	Dinotefuran	20%	N	N	N	N	N	NI	NI	NI

3. Hazardous Identification:

Hazard Category:
☒ Acute ☒ Chronic ☐ Fire ☐ Pressure ☐ Reactive

Hazardous Identification Information:
Can decompose at high temperatures releasing toxic gases.

4. First Aid Measures:

Route(s) of Entry:
Ingestion, contact, inhalation.

Health Hazards (Acute and Chronic):
Harmful if swallowed or absorbed through skin.

Signs and Symptoms:
NI

Medical Conditions Generally Aggravated by Exposure:
NI

Emergency and First Aid Procedures:
If Swallowed:
– Call physician or Poison Control Center immediately for treatment advice.
– Have person sip a glass of water if able to swallow.
– Do not induce vomiting unless told to do so by poison control center or doctor.
– Do not give anything by mouth to an unconscious person.

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 poision control center or doctor for further treatment advice.

If Inhaled:
– Remove victim to fresh air.
– If peson is not breathning, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
– Call a poison control center or doctor for further treatment advice.

If On Skin or Clothing:
– Remove contaminated clothing.
– Rinse skin immediately with plenty of and water for 15 to 20 minutes.
– Call a poison control center or doctor for treatment advice.

In case of emergency, call Rocky Mountain Poison Control Center 877-800-5556. Have the product container label with you when calling a poison control center or doctor, or going for treatment.

Other Health Warnings:
NI

5. Fire Fighting Measures:

Flash Point: NI **F.P. Method:** NI

Lower Explosive Limit: NI

Upper Explosive Limit: NI

Fire Extinguishing Media:
FIRE AND EXPLOSION HAZARD: Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.runoff.

5. Fire Fighting Measures *(cont.)*:

Special Fire Fighting Procedures:
FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece.

Unusual Fire and Explosion:
FIRE AND EXPLOSION HAZARD: Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

6. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:
PERSONAL PRECAUTIONS: Keep unnecessary and unprotected personnel away. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8.

ENVIRONMENTAL PRECAUTIONS: Do not let this chemical enter the environment.

CONTAINMENT/CLEAN-UP METHODS: Vacuum or sweep up material and place in a disposal container.

7. Handling and Storage:

Precautions to be Taken:
HANDLING: Keep away from heat, sparks, and flame. Avoid high temperatures exceeding 150°C. Keep container closed. Use only with adequate ventilation. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical equipment. Take precautionary measures against static discharges. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

STORAGE: Store in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame) . Store away from oxidizers.

Other Precautions:
NI

8. Exposure Controls/Personal Protection:

Ventilation Requirements:
Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment:
EXPOSURE LIMITS:
[Amorphous silica] ACGIH-TLV: Not established. OSHA-PEL: 20 mppf, 80/(%Si02) mg/m3 (TWA)

ENGINEERING CONTROLS: Provide general ventilation. The use of local exhaust ventilation is recommended to control emissions near the source.

RESPIRATORY PROTECTION: When respiratory protection is required for certain operations, use approved respiratory protection for airborne particulates.

PROTECTIVE CLOTHING: Wear impervious protective clothing including boots, gloves, apron or coveralls to prevent skin contact.

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE DEVICES: Safety shower and eye wash station near work area.

9. Physical and Chemical Properties:

Boiling Point: NI **Melting Point:** NI

Evaporation Rate (Butyl Acetate = 1): NI

Vapor Pressure (mm Hg.): See below

Vapor Density (AIR = 1): NI

Specific Gravity (H20 = 1): 0.00000

Solubility In Water: NI

Appearance and Odor: White granule, faint odor

Other Information:
Density: 31.2 - 43.7 pounds/cubic foot
pH = 7.6
Vapor Pressure (mm Hg): 1.7x10-6 @ 30°C for Dinotefuran

10. Stability and Reactivity:

Stability:
Stable however may decompose if heated. Avoid temperatures above 100°F (38°C) for prolonged periods of time. Strong exothermal reaction can occur above 390°F (200°C).

Incompatibility (Materials to Avoid):
None known. Avoid tem

Decomposition/By-Products:
Hydrogen chloride, oxides of nitrogen and carbon.

Hazardous Polymerization:
Product will not undergo polymerization.

11. Toxicological Information:

IRRITATION DATA:
Eye rabbit: Mild irritant
Skin rabbit: Mild irritant

SENSITIZATION:
Skin guinea pig: Not sensitizing

ACUTE TOXICITY:
Oral rat (male, female) LD50 >2000 mg/kg
Dermal rat (male, female) LD50 >2000 mg/kg
Inhalation rat (male, female) LC50 >2.943 mg/L

MUTATION DATA:
Ames test: Negative
Chromosomal aberration: Negative
DNA damage test: Negative

CARCINOGENICITY: Non-carcinogen.

TERATOGENICITY: No developmental toxicity.

REPRODUCTIVE TOXICITY: No reproductive effect.

ECOTOXICITY:
Carp LC50 >100 ppm/96 hr
Rainbow trout LC50 108 ppm/96 hr
Daphnia Magna EC50 199 ppm/48 hr
Algae ErCso >100 ppm/O-72 hr
(Pseudokirchneriella subcapitata)

Toxic to silk worm.

Very toxic to bees.

PERSISTENCE/DEGRADABILITY: Not available.

BIOACCUMULATION POTENTIAL: Not available.

12. Ecological Information:

This pesticide is toxic to shrimp. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not dispose equipment washwaters or rinsate into a natural drain or water body.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Dinotefuran and its degradate, MNG have the properties and characteristics associated with chemicals detected in ground water. The high water solubility of dinotefuran, and its degradate, MNG, coupled with its very high mobility, and resistance to biodegradation indicates that this compound has a strong potential to leach to the subsurface under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination. Periodic monitoring of shallow groundwater in the use area is recommended.

13. Disposal Considerations:

Whatever cannot be saved for recovery may be burned in an approved incinerator or disposed in approved waste facility. Ensure compliance with local, state and federal regulations.

14. Transport Information:

The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept.

UN Class : Not hazardous material

UN Number : None

Freight Class: PESTICIDES, NOI - NMFC #155050-6

In our current available sizes, this product does not qualify as a Hazardous Material.

15. Regulatory Information:

OSHA STATUS: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS: All the ingredients in this mixture are on the TSCA Chemical Substances Inventory or are exempt.

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III:
SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None
SECTION 311/312 HAZARD CATEGORIES: Immediate Health

Hazard, Delayed health hazard
SECTION 313 TOXIC CHEMICALS: None

RCRA STATUS: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

16. Other Information:

REASON FOR ISSUE: New MSDS in the ANSI Z400.1-1998 format

NOTE: NI means not indicated.

The information and statements in this Material Safety Data Sheet are believed to accurately reflect the scientific evidence used in making the hazard determination, but is not to be construed as a warranty or representation for which we assume legal responsibility. Additional information may be necessary or desirable depending on particular, exceptional or variable conditions or circumstances of use or storage or because of locally applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information available to you and must make independent determinations of the suitability of the information for your particular circumstances or conditions and of the completeness of the information available from all sources to assure both the proper use of the material described herein and the safety and health of employees.

01584