



SAFETY DATA SHEET

Section 1: Company and Product Identification

Product Name:	PIAZZ™	General Product Description:
Product Code:	AC-PIAZZIBC	PIAZZ is a dry seed treatment designed to impart a shine on the finished treated seed.
Company:	Agrilead, Inc. 441 E. Lucas Street Russell, KS 67665 PH: 785-483-5000	
Emergency Response:	INFOTRAC 800-535-5053	

Section 2: Hazards Identification

OSHA/HCS STATUS:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Hazard Pictograms:	Not Applicable
Signal Word:	Not Applicable Note: a CAUTION signal word is included on the package label as good measure to keep product out of reach of children.
Hazard Category:	Non-classified
Hazard Statements:	Risk of cancer depends on duration and level of exposure. No evidence of risk to humans. (TiO ₂)
Precautionary Statements:	Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Hazards not otherwise classified:	Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3: Composition / Information on Ingredients

Ingredient Name	Cas #	%
Titanium Dioxide	13463-67-7	18-38

Any concentration shown as a range is to protect confidentiality or is due to batch variation. There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

Section 4: First Aid Measures

General Info:	In general, product does not have any acute hazard characteristics. Treat exposures symptomatically as needed.
Potential acute health effects:	Eye Contact: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes. Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Skin Contact: No known significant effects or critical hazards. Ingestion: No known significant effects or critical hazards.

FIRST AID If ingested:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
FIRST AID If inhaled:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
FIRST AID Eye contact:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
FIRST AID Skin contact:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Note to Physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5: Fire Fighting Measures

General Info:	No specific fire or explosion hazard.
Extinguishing Method / Equipment:	Use dry chemical, CO ₂ , water spray (fog) or foam.
Special protective actions for fire- fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Hazardous Decomposition Info:	Decomposition products may include the following materials: metal oxide/oxides.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and procedures:	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing dust. Ventilate area if easy to do so. For personal protection, see section 8 of the SDS.
Containment Equipment and Procedures:	Small Spills: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Large Spills: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7: Handling and Storage

Safe Handling Precautions:	Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust.
Recommendations for Storage:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Advice on general occupational hygiene:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Incompatibilities:	No specific data available.

Section 8: Exposure Control / Personal Protection

General / Engineering Controls:	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Work Clothing:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Eye/face protection:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields. If operating conditions cause high dust concentrations to be produced, use dust goggles.
Skin Protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory Protection:	In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, air-purifying or airfed respirator complying with an approved standard if a risk assessment indicates this is necessary.
Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Substances with Exposure Limits	CAS#	Exposure Limits
Titanium Dioxide	13463-67-7	OSHA PEL (United States, 2/2013). TWA: 15 mg/m ³ 8 hours. Form: Total dust OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 4/2014). TWA: 10 mg/m ³ 8 hours.

Section 9: Physical and Chemical Properties

Physical State:	Solid [Powder]	Melting Point:	Not available
Color:	Off-White	Boiling Point/Range:	Not available
Oder:	Oderless	pH:	Not Tested
Relative Density:	2.3 to 3	Flash Point:	Not applicable
VOC %	0%	Lower Flam Limits:	Not tested

Section 10: Stability and Reactivity

Stability/Reactivity:	The product is stable. There is no specific test data related to reactivity of this product or its ingredients.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Incompatible materials:	No specific data.
Decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological Information

Toxicological Information (contained substances)

Hazardous substance (name)	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-

Acute Toxicity (Conclusion/Summary):	No known significant effects or critical hazards.
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Likely Routes of Exposure: Not available.

Potential Acute Health Effects: **Eye Contact:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes. **Inhalation:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. **Skin Contact:** No known significant effects or critical hazards. **Ingestion:** No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics:

Eye Contact: Adverse symptoms may include irritation & redness. **Inhalation:** Adverse symptoms may include respiratory tract irritation, coughing. **Skin Contact:** No specific data. **Ingestion:** No specific data.

Potential Chronic Health Effects:

General: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Carcinogenicity or mutagenicity: No known significant effects or critical hazards.

Other Notes: No known significant effects or critical hazards for teratogenicity, developmental, or fertility effects.

Section 12: Ecological Information

Persistence and Degradability: Not available.

Mobility in Soil: Not available.

Bioaccumulative potential: Not available.

Product/Ingredient	Result	Species / Exposure
Titanium Dioxide	Acute EC50 >1000000 µg/l Fresh water	Daphnia - Daphnia magna / 48 hours
	Acute LC50 20000 mg/l Fresh water	Daphnia - Daphnia magna -Neonate / 48 hours
	Acute LC50 5.5 ppm Fresh water	Daphnia - Daphnia magna -Juvenile (Fledgling, Hatchling, Weanling) / 48 hours
	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus / 96 hours
	Chronic NOEC 1 ppm Fresh water	Daphnia - Daphnia magna -Juvenile (Fledgling, Hatchling, Weanling) / 48 hours
	Chronic NOEC 500 ppm Fresh water	Daphnia - Daphnia magna -Juvenile (Fledgling, Hatchling, Weanling) / 48 hours

Section 13: Disposal Information

Disposal Methods:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14: Transport Information

DOT: Not regulated for transport.

IMO/IMDG: Not regulated for transport.

IATA: Not regulated for transport.

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15: Regulatory Information

TSCA: All components listed on the TSCA 8(b) inventory.

U.S. Federal regulations: Clean Water Act (CWA) 311: sodium hydroxide

SARA 313 None identified

Toxics in Packaging (CONEG): In compliance.

Canadian DSL: All substances in product are listed or exempted.

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted.

Korea inventory: All components are listed or exempted.

International Lists:

Malaysia Inventory (EHS Register): All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Europe Inventory: Please contact your supplier to get the information.

Section 16: Other Information

National Fire Protection Association (U.S.A.)

1 - Health

0 - Special

0 - Instability/Reactivity

0 - Flammability

SDS Author: Agrilead Regulatory Manager

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