Revision Date: September 3, 2021 **Date of issue: September 3, 2021** **Version: 1.0**

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Graph-Ex for Soybeans

Product Code: 3049

1.2. Intended Use of the Product

Use of the substance/mixture: Seed Treatment

1.3. Name, Address, and Telephone of the Responsible Party

Company

Agrauxine Corp.
375 Bonnewitz Avenue
Van Wert, Ohio 45891

1.4. Emergency Telephone Number

Company number : +1 419-232-2461

Emergency Number (CHEMTREC) : +1 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Comb. Dust

Carc. 1A	H350
Eye Irrit. 2B / Skin irrit. 2	H315+H320
Resp. irritant	H335

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : May form combustible dust concentrations in air.
H350 (1A) – May cause cancer through inhalation.
H315+H320 (2-skin; 2B-eyes) – Causes Skin and Eye Irritation
H335 – May cause respiratory irritation

Precautionary Statements (GHS-US) : P203 – Obtain, read, and follow all safety instructions before use.
P261 – Avoid breathing dust
P264 – Wash face, hands, and any exposed skin thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves, respiratory protection, eye protection.
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.
P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P318 – If exposed or concerned: Get medical advice.
P319 – Get medical help if you feel unwell.

P332+P317 – If skin irritation occurs: Get medical help.
P337+P317 – If eye irritation persists: Get medical help.
P362+P364 – Take off contaminated clothing and wash it before reuse.
P501 – Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards
Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1. Substance
Not applicable

3.2. Mixture

Name	Product Identifier	%
Talc	(CAS No) 14807-96-6	40 - 60
Graphite	(CAS No) 7782-42-5	10 - 30
Proprietary Amorphous Base	(CAS No) Proprietary	10 - 30
Proprietary Blend of Live Bacterial Cultures	(CAS No) N/A	1 - 2
Quartz	(CAS No) 14808-60-7	<1

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].
Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES
4.1. Description of First Aid Measures
First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid Measures After Inhalation: When symptoms occur: Go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.
First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/Injuries: This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I) probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).
Symptoms/Injuries After Inhalation: Cough, dyspnea (breathing difficulty), wheezing; decreased pulmonary function, progressive respiratory symptoms (silicosis). Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica (quartz) over a relatively short period; the lung lesions can appear within five years of the initial exposure. The progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that the lung lesions appear earlier and the progression is more rapid.
Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis can be fatal.

Symptoms/Injuries After Skin Contact: Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: Contact may cause irritation due to mechanical abrasion.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: May cause cancer by inhalation.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media
Suitable Extinguishing Media: Carbon dioxide, dry chemical, foam, water spray, fog.
Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising from the Substance or Mixture
Fire Hazard: Combustible Dust.
Explosion Hazard: Dust clouds can be explosive.
Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters
Precautionary Measures Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Other Information: Risk of dust explosion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Avoid prolonged contact with eyes, skin, and clothing. Do not breathe dust. Avoid all unnecessary exposure. Use PPE described in Section 8.

6.1.1. For Non-emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).
Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions
Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.
Methods for Cleaning Up: Avoid actions that cause dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Use PPE described in Section 8.

6.4. Reference to Other Sections
See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Additional Hazards When Processed: Do not breathe dust. Accumulation and dispersion of dust with an ignition source can

cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

7.3. Specific End Use(s) Seed Treatment

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Proprietary Amorphous Base		
USA ACGIH	ACGIH TLV (TWA) (mg/m³)	10 mg/m³ (Recommended for inhalable particles; no TLV established)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
Graphite (7782-42-5)		
USA ACGIH	ACGIH TLV (TWA) (mg/m³)	2 mg/m³ (all forms except graphite fibers-respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	2.5 mg/m³ (natural-respirable dust)
USA NIOSH	NIOSH IDLH (mg/m³)	1250 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (synthetic-total dust) 5 mg/m³ (synthetic-respirable fraction)
Talc (14807-96-6)		
USA ACGIH	ACGIH TLV (TWA) (mg/m³)	2 mg/m³ (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen containing no asbestos fibers
USA NIOSH	NIOSH REL (TWA) (mg/m³)	2 mg/m³ (containing no Asbestos and <1% Quartz-respirable dust)
USA NIOSH	NISOH IDLH (mg/m³)	1000 mg/m³ (containing no asbestos and <1% quartz)
Quartz (14808-60-7)		
USA ACGIH	ACGIH TLV (TWA) (mg/m³)	0.025 mg/m³ (respirable particulate matter)
USA ACGIH	ACGIH chemical category	A2 --- Suspected Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³ (respirable dust)
USA NIOSH	NIOSH IDLH (mg/m³)	50 mg/m³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.050 mg/m³ (0.025 mg/m³ Action Level)

8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate ventilation to minimize dust concentrations. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation andmaterial transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-

deficient environment.

Personal Protective Equipment : Gloves. NIOSH-approved dust mask. Protective goggles. Protective clothing.

Materials for Protective Clothing : Wear suitable protective clothing.

Hand Protection : Wear chemically resistant protective gloves.

Eye Protection : Chemical goggles or safety glasses.

Respiratory Protection : NIOSH/MSHA approved respiratory protection should be worn. Particulate masks, half face respirators, or positive-pressure respirators should be worn and may be required for high concentrations. Respirator protection must be provided in accordance with current local regulations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Gray Powder
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: No data available
Solubility	: Insoluble in water
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under normal temperature and pressure.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Heat, hot surfaces, sparks, open flames, and other ignition sources. Avoid creating/spreading dust.

10.5. Incompatible Materials: Strong oxidizers. Acetylene. Ammonia.

10.6. Hazardous Decomposition Products: Carbon oxides (CO, CO_2). Silicon oxides. Crystalline silica exists in several forms, the most common of which is quartz. If crystalline silica (quartz) is heated to more than 870°C, it can change to a form of crystalline silica known as tridymite, and if crystalline silica (quartz) is heated to more than 1470°C, it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as tridymite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: No data available for the product

The toxicological classifications are given below for the ingredients present in the product at their respective concentrations.

Proprietary Amorphous Base	
LD50 Oral Mouse	12960 mg/kg
Skin Corrosion/Irritation	Not Classified
Serious Eye Damage/Irritation	Not Classified
Respiratory or Skin Sensitization	Not Classified
Germ Cell Mutagenicity	Not Classified
Carcinogenicity	Not Classified
Graphite (7782-42-5)	
LD50 Oral Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 2000 mg/ m^3 (4 hours)
Skin Corrosion/Irritation	Not Classified
Serious Eye Damage/Irritation	Not Classified
Respiratory or Skin Sensitization	Not Classified
Germ Cell Mutagenicity	Not Classified
Carcinogenicity	Not Classified
Talc (14807-96-6)	
IARC group	3 – Not classified as to its carcinogenicity to humans
LD50 Oral Rat	>5000 mg/kg
LD50 Dermal Rat	>2000 mg/kg bw day
LC50 Inhalation Rat	>2100 mg/m^3
Skin Corrosion/Irritation	Not Classified
Serious Eye Damage/Irritation	Not Classified
Respiratory or Skin Sensitization	Not Classified
Germ Cell Mutagenicity	Not Classified
Carcinogenicity	Not Classified
Quartz (14808-60-7)	
IARC group	1 – Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogen.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified below 1.0%
Aspiration Hazard	Not classified
Symptoms/Injuries After Inhalation	Cough, dyspnea (breathing difficulty), wheezing; decreased pulmonary function, progressive respiratory symptoms (silicosis). Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five years of the initial exposure. The progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that the lung lesions appear earlier and the progression is more rapid. Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis

	include progressive shortness of breath, fever, cough and weight loss. Acute silicosis can be fatal.
Symptoms/Injuries After Skin Contact:	Skin contact with large amounts of dust may cause mechanical irritation.
Symptoms/Injuries After Eye Contact	Contact may cause irritation due to mechanical abrasion
Symptoms/Injuries After Ingestion	Ingestion is likely to be harmful or have adverse effects
Chronic Symptoms	May cause cancer by inhalation

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Graph-Ex Soybean	
LC50 Fish	Not established

12.2. Persistence and Degradability

Graph-Ex Soybean	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Graph-Ex Soybean	
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT Not regulated for transport
14.2. In Accordance with IMDG Not regulated for transport
14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Graph-Ex SA Soybean	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Proprietary Amorphous Base	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory – Exempt-Naturally Occurring Substance	
Graphite (7782-42-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Talc (14807-96-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Quartz (14808-60-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2 US State Regulations

U.S. --- California --- Proposition 65 --- Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
Proprietary Amorphous Base	
U.S. --- New Jersey --- Right to Know Hazardous Substance List U.S. --- Pennsylvania --- RTK (Right to Know) List	
Graphite (7782-42-5)	
U.S. --- Pennsylvania --- RTK (Right to Know) List	
Talc (14807-96-6)	
U.S. --- New Jersey --- Right to Know Hazardous Substance List U.S. --- Pennsylvania --- RTK (Right to Know) List	
Quartz (14808-60-7)	
U.S. --- New Jersey --- Right to Know Hazardous Substance List U.S. --- Pennsylvania --- RTK (Right to Know) List	

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : **September 3, 2021**

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Carc. 1A	Carcinogenicity Category 1A
Comb. Dust	May form combustible dust concentrations in air
Skin irrit. 2	Skin irritation cat 2
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
H315+H320	Causes skin and eye irritation
H335	May cause respiratory irritation
H350	May cause cancer

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)