

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 1/24/2024 Version: 1.0

## **SECTION 1: Identification**

## 1.1. Identification

Product form : Mixture

Product name : Graph-Ex SA Inoculant Seed Lubricant for Peanuts

Item code : 3060

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Seed treatment

## 1.3. Supplier

Agrauxine Corp.
375 Bonnewitz Avenue
Van Wert, Ohio 45891
United States
T +1 419-232-2461

fds-agx@agrauxine.lesaffre.com

## 1.4. Emergency telephone number

Emergency number : CHEMTREC: +1 800-424-9300

## **SECTION 2: Hazard(s) identification**

## 2.1. Classification of the substance or mixture

## **GHS US classification**

Carcinogenicity Category 1A H350 May cause cancer

Specific target organ toxicity (repeated exposure) Category 1 H372 Causes damage to organs through prolonged or repeated

exposure

Combustible Dust May form combustible dust concentrations in air

Full text of H statements : see section 16

## 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : May form combustible dust concentrations in air

H350 - May cause cancer

H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust.

P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

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## 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification

: Microorganisms can potentially cause sensitisation reactions. Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

## 2.4. Unknown acute toxicity (GHS US)

No additional information available

## **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

## 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Talc (Mg3H2(SiO3)4)	CAS-No.: 14807-96-6	40 - 60	STOT RE 1, H372
Graphite	CAS-No.: 7782-42-5	10 - 15	Carc. 1A, H350 STOT RE 1, H372 Comb. Dust
Bradyrhizobium sp (Vigna)	-	0.5 – 1	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Quartz (SiO2)	CAS-No.: 14808-60-7	< 1	Carc. 1A, H350 STOT RE 1, H372
Trichoderma virens	-	0.5 – 1	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335

Full text of hazard classes and H-statements: see section 16

## **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

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First-aid measures after skin contact

First-aid measures after eye contact

First-aid measures after ingestion

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention. If possible show him this sheet. Failing this, show him the packaging or label.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

Take off contaminated clothing. Wash skin with plenty of water. If case of redness or irritation,

call a doctor.

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophtalmologist if irritation persists.

: Never attempt to induce vomiting. Rinse mouth out with water. Immediately call a poison center or doctor/physician.

## 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Microorganisms can potentially cause sensitisation reactions.

Symptoms/effects after inhalation : Dust from this product may cause irritation to the respiratory tract. Coughing. Respiratory difficulties. Prolonged exposure to alveolar dust containing quartz may cause silicosis or

pulmonary fibrosis.

Symptoms/effects after skin contact : Dust from this product may cause skin irritation. Symptoms/effects after eye contact : Dust from this product may cause eye irritation.

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Chronic symptoms : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

## 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Foam. Chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

## 5.2. Specific hazards arising from the chemical

Explosion hazard : May form combustible dust concentrations in air.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO2). Silicon oxide.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Cool down the containers exposed to heat with a water spray. Contain the extinguishing fluids by

bunding.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Complete protective

clothing. Self contained breathing apparatus.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ventilate spillage area. Avoid dust formation. Remove ignition sources. Use special care to avoid

static electric charges.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective

equipment may intervene. Avoid contact with skin, eyes and clothing. Do not breathe dust.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

#### 6.2. Environmental precautions

Contain the spilled material by bunding. Notify authorities if product enters sewers or public waters.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Avoid dust production. Clean up dry product using methods that do not cause its dispersion into

the air, for example: suction cleaners (portable industrial strength, equipped with an effective air particle filter (HEPA filter) or some other equivalent technique). Do not use compressed air for

cleaning. Shovel into suitable and closed container for disposal.

Other information : Dispose of in accordance with relevant local regulations.

## 6.4. Reference to other sections

Concerning personal protective equipment to use, see item 8. Concerning disposal elimination after cleaning, see item 13.

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## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing. Do not breathe dust. Avoid dust production. Avoid ignition sources. Avoid the build-up of electrostatic charge. Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures

Do not drink, eat or smoke in the workplace. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take off immediately all contaminated clothing and wash it before reuse.

## 7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Provide adequate ventilation to minimize dust concentrations.

Storage conditions

: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep away from sources of ignition. Prevent build-up of electrostatic charges (e.g., by grounding).

Incompatible materials

: Strong acids, strong bases and strong oxidants. Acetylene. Ammonia.

Special rules on packaging

: Store in original container.

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

Talc (Mg3H2(SiO3)4) (14807-96-6)				
USA - ACGIH - Occupational Exposure Limits				
Local name	Talc			
ACGIH OEL TWA	2 mg/m³ (Containing no asbestos fibers. E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica, R - Respirable particulate matter) 2 mg/m³ (Containing asbestos fibers. R - Respirable particulate matter)			
	0.1 fibers/cm³ (Containing asbestos fibers. F - Respirable fibers)			
Remark (ACGIH)	Containing no asbestos fibers = TLV® Basis: Pulm fibrosis; pulm func. Notations: A4 Containing asbestos fibers = TLV® Basis: Pneumoconiosis; lung cancer; mesothelioma. Notations: A1 (Confirmed Human Carcinogen)			
Regulatory reference	ACGIH 2023			
USA - OSHA - Occupational Exposure Limits				
Local name	Talc (not containing asbestos) (Silicates (less than 1% crystalline silica))			
OSHA PEL TWA	20 mppcf			
Remark (OSHA)	Table Z-3. CAS No. source: eCFR Table Z-1.			
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts			
Graphite (7782-42-5)				
USA - ACGIH - Occupational Exposure Limits				
Local name	Graphite (all forms excepte graphite fibers)			
ACGIH OEL TWA	2 mg/m³ (R - Respirable particulate matter)			
Remark (ACGIH)	TLV® Basis: Pneumoconiosis			
Regulatory reference	ACGIH 2023			

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Graphite (7782-42-5)				
USA - OSHA - Occupational Exposure Limits				
Local name	Graphite (Natural)			
OSHA PEL TWA	15 mppcf			
Remark (OSHA)	Table Z-3. CAS No. source: eCFR Table Z-1.			
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts			
Quartz (SiO2) (14808-60-7)				
USA - ACGIH - Occupational Exposure Limits				
Local name	Silica crystaline - quartz			
ACGIH OEL TWA	0.025 mg/m³ (R - Respirable particulate matter)			
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)			
Regulatory reference	ACGIH 2023			
USA - OSHA - Occupational Exposure Limits				
Local name	Quartz (Respirable) (Silica: Crystalline)			
OSHA PEL TWA	0.05 mg/m³			
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO2+5)) for mppcf and (10 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.			
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts			
Starch (9005-25-8)				
USA - ACGIH - Occupational Exposure Limits				
Local name	Starch			
ACGIH OEL TWA	10 mg/m³			
Remark (ACGIH)	TLV® Basis: Dermatitis. Notations: A4 (Not classifiable as a Human Carcinogen)			
Regulatory reference	ACGIH 2023			
USA - OSHA - Occupational Exposure Limits	USA - OSHA - Occupational Exposure Limits			
Local name	Starch			
OSHA PEL TWA	15 mg/m³ (Total dust) 5 mg/m³ (Respirable fraction)			
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1			
USA - NIOSH - Occupational Exposure Limits	USA - NIOSH - Occupational Exposure Limits			
NIOSH REL (TWA)	10 mg/m³ Total dust 5 mg/m³ Respirable fraction			

## 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure that there is a suitable ventilation system. Emergency eye wash fountains and safety

showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Do not allow to enter drains or water courses.

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## 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Chemically resistant protective gloves. Breakthrough time: refer to the recommendations of the supplier

#### Eye protection:

Safety glasses

#### Skin and body protection:

Protective clothing

## Respiratory protection:

Dust mask. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US)

#### Other information:

Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state: SolidAppearance: Powder.Color: Gray

Odor : No data available Odor threshold : No data available : Not applicable pН Melting point No data available Freezing point No data available Boiling point : No data available : Not applicable Flash point Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not flammable. Vapor pressure : No data available : No data available Relative vapor density at 20°C Relative density : No data available Solubility No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature No data available Decomposition temperature No data available Viscosity, kinematic Not applicable Viscosity, dynamic : Not applicable **Explosion limits** : No data available

Explosive properties : May form combustible dust concentrations in air.

Oxidizing properties : Non oxidizing.

## 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

None to our knowledge.

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#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

May form combustible dust concentrations in air.

#### 10.4. Conditions to avoid

Avoid dust production. Avoid the build-up of electrostatic charge. Ignition sources.

#### 10.5. Incompatible materials

Strong acids, strong bases and strong oxidants. Acetylene. Ammonia.

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) Not classified Acute toxicity (inhalation) Not classified Skin corrosion/irritation Not classified pH: Not applicable Serious eye damage/irritation : Not classified pH: Not applicable Not classified Respiratory or skin sensitization Germ cell mutagenicity Not classified Carcinogenicity : May cause cancer.

Quartz (SiO2) (14808-60-7)	
IARC group 1 - Carcinogenic to humans	
National Toxicology Program (NTP) Status	Known Human Carcinogens

Reproductive toxicity : Not classified STOT-single exposure : Not classified

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified Viscosity, kinematic : Not applicable

Symptoms/effects : Microorganisms can potentially cause sensitisation reactions.

Symptoms/effects after inhalation : Dust from this product may cause irritation to the respiratory tract. Coughing. Respiratory difficulties. Prolonged exposure to alveolar dust containing quartz may cause silicosis or

pulmonary fibrosis.

Symptoms/effects after skin contact : Dust from this product may cause skin irritation. Symptoms/effects after eye contact : Dust from this product may cause eye irritation.

Chronic symptoms : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

No additional information available

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## 12.2. Persistence and degradability

## **Graph-Ex SA Inoculant Seed Lubricant for Peanuts**

Persistence and degradability No additional information available.

## 12.3. Bioaccumulative potential

No additional information available

## 12.4. Mobility in soil

No additional information available

## 12.5. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Waste treatment methods : Dispose of in accordance with relevant local regulations. Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

## **SECTION 14: Transport information**

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA		
14.1. UN number					
Not regulated for transport					
14.2. Proper Shipping Name					
Not regulated	Not regulated	Not regulated	Not regulated		
14.3. Transport hazard class(es	14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated		
14.4. Packing group					
Not regulated	Not regulated	Not regulated	Not regulated		
14.5. Environmental hazards					
Not regulated	Not regulated	Not regulated	Not regulated		

## 14.6. Special precautions for user

DOT

Not regulated

**TDG** 

Not regulated

**IMDG** 

Not regulated

IATA

Not regulated

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## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Trichoderma virens		Not present	-	
Talc (Mg3H2(SiO3)4)	14807-96-6	Present	Active	
Graphite	7782-42-5	Present	Active	
Quartz (SiO2)	14808-60-7	Present	Active	
Starch	9005-25-8	Present	Active	XU
Bradyrhizobium sp (Vigna)		Not present	-	

## Trichoderma virens

Not subject to reporting requirements of the United States SARA Section 313

## Talc (Mg3H2(SiO3)4) (14807-96-6)

Not subject to reporting requirements of the United States SARA Section 313

## **Graphite (7782-42-5)**

Not subject to reporting requirements of the United States SARA Section 313

## Quartz (SiO2) (14808-60-7)

Not subject to reporting requirements of the United States SARA Section 313

## Starch (9005-25-8)

Not subject to reporting requirements of the United States SARA Section 313

## Bradyrhizobium sp (Vigna)

Not subject to reporting requirements of the United States SARA Section 313

#### 15.2. International regulations

## **CANADA**

## Trichoderma virens

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

## Talc (Mg3H2(SiO3)4) (14807-96-6)

Listed on the Canadian DSL (Domestic Substances List)

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#### **Graphite (7782-42-5)**

Listed on the Canadian DSL (Domestic Substances List)

#### Quartz (SiO2) (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List)

## Starch (9005-25-8)

Listed on the Canadian DSL (Domestic Substances List)

## Bradyrhizobium sp (Vigna)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### **EU-Regulations**

#### Trichoderma virens

Not listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

## Talc (Mg3H2(SiO3)4) (14807-96-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### **Graphite (7782-42-5)**

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

## Quartz (SiO2) (14808-60-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Starch (9005-25-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

## Bradyrhizobium sp (Vigna)

Not listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

## **National regulations**

#### **Graph-Ex SA Inoculant Seed Lubricant for Peanuts**

All components of this product are present and listed as Active, or excluded from the directory, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

**SARA 313** 

This product contains no chemicals in excess of the applicable de minimis concentration that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (Table 372.65).

Except Bradyrhizobium sp (Vigna), Trichoderma virens, all chemical substances in this product are listed on the Canadian DSL (Domestic Sustances List)

All chemical substances in this product are listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) except *Bradyrhizobium sp (Vigna), Trichoderma virens*, Expanded Perlite (93763-70-3)

## Talc (Mg3H2(SiO3)4) (14807-96-6)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

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## **Graphite (7782-42-5)**

Listed on INSQ (Mexican national Inventory of Chemical Substances)

## Quartz (SiO2) (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

Listed as carcinogen on NTP (National Toxicology Program)

#### Starch (9005-25-8)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

## 15.3. US State regulations

## **Graph-Ex SA Inoculant Seed Lubricant for Peanuts**

U.S. - California - Proposition 65 - Other information

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm (Quartz 14808-60-7)

# Quartz (SiO2) (14808-60-7)

	· · /				
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk	Maximum allowable
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	level (NSRL)	dose level (MADL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male		
Yes	No	No	No		

Component	State or local regulations
Talc (Mg3H2(SiO3)4)(14807-96-6)	U.S Pennsylvania - RTK (Right to Know) List
Graphite(7782-42-5)	U.S Pennsylvania - RTK (Right to Know) List
Quartz (SiO2)(14808-60-7)	U.S Pennsylvania - RTK (Right to Know) List
Starch(9005-25-8)	U.S Pennsylvania - RTK (Right to Know) List

## **SECTION 16: Other information**

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Data sources : ECHA (European Chemicals Agency). SDS of suppliers.

Full	text	of	Н-р	hrases
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H315	Causes skin irritation
H320	Causes eye irritation

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Full text of H-phrases		
H335 May cause respiratory irritation		
H350	H350 May cause cancer	
H372 Causes damage to organs through prolonged or repeated exposure		

Abbreviations an	Abbreviations and acronyms	
LC50	Median lethal concentration	
LD50	Median lethal dose	
DOT	Department of Transportation (DOT)	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
OECD	Organisation for Economic Co-operation and Development	
TDG	Transportation of Dangerous Goods	

Safety Data Sheet (SDS), USA

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.