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SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture Product Name: Shaw's Treflan 5G EPA Reg. No. 62719-98-8378

1.2. Intended Use of the Product Use of the substance/mixture: Herbicide 1.3. Details of the Supplier of the Safety Data Sheet

Knox Fertilizer Company, Inc. P.O. Box 248 Knox, IN 46534 TEL: 574-772-6275

1.4. Emergency Telephone Number Emergency Number: CHEMTREC 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture Classification (GHS-US)

Skin Irrit. 2	H315
Skin Sens. 1	H317
Acute Tox. 4	H332
Carc. 1B	H350

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US):



Signal Word (GHS-US)

Hazard Statements (GHS-US)

: H315 - Causes skin irritation

: Danger

- H317 May cause an allergic skin reaction
- H335 May cause respiratory irritation
- H350 May cause cancer (inhalation)
- H400 Very toxic to aquatic life

Precautionary Statements (GHS-US)

- : P201 Obtain special instructions before use
 - P202 Do not handle until all safety precautions have been read and understood
 - P261 Avoid breathing dust
 - P264 Wash exposed areas thoroughly after handling
 - P270 Do not eat, drink or smoke when using this product.
 - P271 Use only outdoors or in a well-ventilated area
 - P272 Contaminated work clothing should not be allowed out of the workplace
 - P273 Avoid release to the environment
 - P280 Wear protective gloves/ protective clothing/eye protection/face protection
 - P302+P352 IF ON SKIN: Wash with plenty of soap and water

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> P304+P340 - IF INHALED: Remove person to fresh aie and keep comfortable for breathing. P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 - Specific treatment (see Section 4 on this label) P330 - If swallowed: Rinse mouth. P332+P313 - If skin irritation occurs: Get medical advice/attention P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P337+P313 - If eve irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse P362+P364 - Take off contaminated clothing and wash it before reuse P391 - Collect spillage P403+P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up P501 - Dispose of contents/container according to local, regional, national, and international regulations

2.3. Other Hazards

Other Hazards: No additional information available.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture (Exact percentages of ingredients are being withheld as a trade secret)

Name	Product identifier	%	Classification (GHS-US)
Trifluralin	(CAS No) 1582-09-8	5.00	Skin Irrit. 2, H315 Skin Sens. 1, H317 Acute Tox. 4. H332 Carc. 1B, H350 Aquatic Acute 1, H400
D110 Fluid	CAS No) 64742-47-8	1.00	Not classified
Non-Hazardous Inert Ingredients	Various	94.00	Not classified

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: If medical advice is needed, have product container or label at hand. **First-aid Measures After Inhalation**: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.
 First-aid Measures After Eye Contact: Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open. Obtain medical attention if irritation develops or persists.
 First-aid Measures After Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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4.2 Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Harmful if swallowed. Eye irritation. Causes skin irritation. May cause an allergic reaction in sensitive individuals.

Symptoms/Injuries After Inhalation: Irritating to the respiratory system and mucous membranes. May cause cancer by inhalation. May cause drowsiness or dizziness.

Symptoms/Injuries After Skin Contact: Causes skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation. May cause an allergic skin reaction. **Symptoms/Injuries After Ingestion:** Harmful if swallowed. Swallowing a small quantity of this material will result in serious hazard.

Chronic Symptoms: May cause cancer (inhalation).

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Not considered flammable but will burn at high temperatures. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Decomposes above 132 °C (270 °F). Under conditions of fire this material may produce: Ammonia. Nitrogen oxides. Biuret. Cyanuric acid.

Explosion Hazard: May form explosive compounds if mixed with: Calcium hypochlorite. Sodium hypochlorite. Nitrates. Nitric acid. Perchloric acid. Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

Reactivity: This product as shipped in the form of coarse granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

5.3. Advice for Firefighters

Firefighting Instructions: Not flammable

Protection During Firefighting: Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice. This material becomes slippery when wet.

6.1.1. For Non-emergency Personnel

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: Collect as any solid. Ventilate area. Evacuate unnecessary personnel. **6.1.2. For Emergency Responders**

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection. **Emergency Procedures:** If possible, stop flow of product. Contain and collect as any solid. Ventilate

area. Evacuate unnecessary personnel.

6.2. Environmental Precautions

Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

Methods for Cleaning Up: Recover the product by vacuuming, shoveling or sweeping. Avoid generation of dust during clean-up of spills. If spilled directly onto the ground, remove sufficient soil to ensure material is fully recovered. Material may be used if uncontaminated.

6.4. Reference to Other Sections: No additional information available

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SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: This material becomes slippery when wet. Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Wear recommended personal protective equipment. Avoid creating or spreading dust. Hygiene Measures: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture. **Prohibitions on mixed storage:** Store away from: Ammonium nitrate. Refer to Section 10 on Incompatible Materials.

Special Rules on Packaging: Corrosive to copper and its alloys.

7.3. Specific End Use(s)

Fertilizer+Herbicide.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Nuisance Dust		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure all national/local regulations are observed. Personal Protective Equipment: Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection. For particulates and dust: Safety glasses.



Hand Protection: Protective Gloves.

Eye Protection: Safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Environmental Exposure Controls: Ensure adequate ventilation, especially in confined areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State:	Solid.
Appearance:	Yellowish Granules.
Color:	Yellow.
Odor:	Slight. Pungent.
Odor Threshold:	N/Å
pH:	N/A
pH solution:	N/A
Relative Evaporation Rate (butylacetate=1):	N/A
Melting Point:	N/A
Freezing Point:	N/A
Boiling Point:	N/A
Flash Point:	N/A
Relative Vapor Density at 20° C:	No data available

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Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
Flammability (solid, gas):	No data available
Vapor Pressure:	N/A
Ralative Density:	No data available
Density:	45 (45-65) lb/ft ³
Solubility:Water:	Slightly soluble
Partition coefficient: n-octanol/water::	No data available
Viscosity:	N/A

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: This product as shipped in the form of coarse granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

10.2. Chemical Stability: Stable at standard temperature and pressure.

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

10.4. Conditions to Avoid: Protect from moisture. Keep away from heat.

10.5. Incompatible Materials: May form explosive mixture if in contact with strong acid such as nitric or perchloric acids. Avoid contact with: Strong oxidizers. Strong acids, bases. Nitrates. Hypochlorites. Perchlorates. Chlorides. Corrosive to copper and its alloys.

10.6. Hazardous Decomposition Products: Under conditions of fire this material may produce: Nitrogen oxides. Ammonia. Biuret. Carbon oxides (CO, CO₂). Formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects Acute Toxicity: Not classified

Trifluralin (1582-09-8)	
LD₅₀ Oral Rat	>5000 mg/kg
LD ₅₀ Dermal Rat	>5000 mg/kg
LC ₅₀ Inhalation Rat	>4.8 mg/l/4h

Ingestion: Harmful if swallowed. Skin Corrosion/Irritation: Causes skin irritation. Serious Eye Damage/Irritation: Causes eye irritation. Skin Sensitization: Causes skin irritation. Respiratory: May cause respiratory irritation. Germ Cell Mutagenicity: Not classified Carcinogenicity: May cause cancer.

Trifluralin (1582-09-8)) IARC group 3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): No information available. Specific Target Organ Toxicity (Repeated Exposure): No information available Aspiration Hazard: Not classified

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Symptoms/Injuries After Inhalation: Irritating to the respiratory system and mucous membranes. May cause cancer by inhalation. May cause drowsiness or dizziness.

Symptoms/Injuries After Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

Chronic Symptoms: May cause cancer.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use care when applying to turf areas adjacent to any body of water. Drift and runoff from treated turf may adversely affect aquatic organisms in adjacent aquatic sites. 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater.

12.1. Toxicity: Toxic to aquatic life with long lasting effects.

12.2. Persistence and Degradability

Shaw's Treflan 5G	
Persistence and Degradability	May cause long-term adverse effects in the environment. This product is water soluble and eventually biodegrades into elemental nitrogen. Excess nitrogen and nitrates in a body of water will contribute to eutrophication with visible effects such as toxic algae bloom.

12.3. Bioaccumulative Potential: No information available

12.4. Mobility in Soil: No additional information available.

12.5. Other Adverse Effects: Avoid release to the environment..

SECTION 13: DISPOSAL CONSIDERATIONS

Do not contaminate water, food, or feed by storage or disposal.

STORAGE: Store this product only in its original container in a dry, cool, secured storage area. SPILL: In case of spill, sweep up product and dispose of material according to product disposal directions listed below. PRODUCT DISPOSAL: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State, or local regulations. EMPTY CONTAINER DISPOSAL: Non-refillable container. Do not re-use or refill this container. Completely empty bag into application equipment. Offer for recycling, if available. Dispose of empty bag(s) in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

13.1. Waste treatment methods

Sewage Disposal Recommendations: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Waste Disposal Recommendations: Place in an appropriate container and dispose of the contaminated material at a licensed site.

Additional Information: Dispose of waste material 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

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SECTION 15: 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 of non-pesticide chemicals. The hazard information required on the pesticide is reproduced below. The pesticide label also includes other important information, including directions for use.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Prolonged or frequent repeated skin contact while handling the material may cause allergic reaction in some individuals.

15.1. US Federal Regulations

Shaw's Treflan 5G	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Delayed (chronic) health hazard.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable *de minimis* concentration as specified in 40 CFR §372.38(a) 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.

NOT Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. US State Regulations: No information available.

SECTION 16: OTHER INFORMATION

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:

Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin Sensitization Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Carc. 1B	Carcinogenicity Category 1B
Acute Tox. 4 (Inhalation)	Acute Toxicity Category 4 (Inhalation)
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H350	May cause cancer (inhalation)
H400	Very toxic to aquatic life

NFPA Health Hazard:	2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA Fire Hazard:	0 - Material will not burn.
NFPA Reactivity:	 0 - Normally stable, even under fire exposure conditions, and are not reactive with water

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