

Version 1.0 Version Date 12/07/2015

## 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY UNDERTAKING

#### 1.1 Product identifier

Product name 25-0-5

#### 1.2 Relevant use of the product

Applications Fertilizers

#### 1.3 Manufacturer, Importer or Responsible Party

Name FERTI TECHNOLOGIES

Address 560, Chemin Rhéaume, C.P 129

JOL 2JO

Saint-Michel, Québec, Canada

Telephone 450 454-7521

Contact email astpierre@fertitechno.com

## 1.4 Emergency phone number

Telephone USA National Capital Poison Center: 1 800 222 1222

## 2. HAZARDS IDENTIFICATION

Hazard identification according to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### 2.1. The hazard classification of the chemical according to HazCom 2012 (US-GHS)

STOT RE 1 H372 Causes damage to organs [lungs] through prolonged or repeated

exposure [inhalation].

Carc. 1A H350 May cause cancer.

STOT SE 3 H335 May cause respiratory irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Irrit. 2 H315 Causes skin irritation.

## 2.2. Danger symbols





2.3. Signal word Danger

2.4. Hazard statements H372 Causes damage to organs [lungs] through prolonged or repeated

exposure [inhalation].



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H350 May cause cancer.

H335 May cause respiratory irritation.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

## 2.5. Precautionary statements

Prevention 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 thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

Response P304+P340 IF INHALED: Remove person to fresh air and keep comfortable

for breathing.

P314 Get medical advice/attention 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.

P302+P352 IF ON SKIN: Wash with plenty of water.

P362+P364 Take off contaminated clothing and wash it before reuse. P308+P313 If exposed or concerned: Get medical advice/attention.

Storage P405 Store locked up.

Disposal P501 Dispose of contents/container according to local regulations.

2.6. Description of any

hazards not otherwise

classified

Not applicable.

2.7. % ingredient(s) with unknown acute

toxicity

Not applicable.

## toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

	Chemical name	CAS-Nr.	Concentration %
XCU	Urea (90 % - 95 %)	57-13-6	C = 29.1 %
	Sulfur (13 %)	7704-34-9	
	Polymer coating (5 %)	n/a	



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	Non-hazardous dye (< 0.1 %)	Proprietary	
Urea mixture	Carbamide, Carbonyldiamide, Carbamidic Acid) (97.5% - 99.7%)	57-13-6	
	Alkalinity as ammonia (150 ppm max)		C = 27.2 %
	Methylenediurea (0 % - 2.5 %)	13547-17-6	
	Biuret (0% -1.5%)	108-19-0	
Calcium carbonate	Limestone (80 % - 100 %)	1317-65-3	6 25 7 0/
	Crystalline silica (20 %)	14808-60-7	C = 25.7 %
Iron oxide sulfates		1309-37-1	C = 10.0 %
Potassium chloride		7447-40-7	C = 8.1 %

#### 4. FIRST AID MEASURES

#### 4.1 First Aid measures after Inhalation

Following inhalation 
If inhalation occurs, remove affected person from area to fresh air. If not

breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Get medical

attention if irritation develops and persists.

#### 4.2 First Aid measures after Skin exposure

Following skin contact Wash off immediately with plenty of water for at least 15 minutes. Take off

contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Get medical attention if irritation develops and

persists.

#### 4.3 First Aid measures after Eye exposure

Following eye contact Rinse immediately with plenty of water, also under the eyelids, for at least

15 minutes. Get medical attention if irritation develops and persists.

## 4.4 First Aid measures after Ingestion

Following ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Drink

1 or 2 glasses of water. If large quantities are swallowed, seek medical

attention.

#### 4.5 Most important symptoms and effects, both acute and delayed

INHALATION May cause respiratory irritation. Causes damage to organs [lungs] through

prolonged or repeated exposure [inhalation].

SKIN Causes skin irritation.
EYES Causes serious eye irritation.

INGESTION Not classified.

### 4.6 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically.



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### 5. FIREFIGHTING MEASURES

5.1 Extinguishing media Suitable:

> Use extinguishing agent suitable for type of surrounding fire. Avoid excessive water to minimize runoff. Prevent firefighter water from entering the

Small fires: Water spray, foam, dry chemical or CO2

Large fires: Water spray, fog or foam.

Unsuitable: Not applicable.

5.2 Special hazards arising from chemical or mixture during the fire

Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. In case of fire hazardous decomposition products may be produced such as:

Sulphur oxides

Ammonia

Carbon monoxide

Carbon dioxide (CO2)

**5.3 Special Protective Precautions or equipment** for firefighters

In the event of fire and/or explosion do not breathe fumes. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

### **6. ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment

Wear personal protective equipment.

**6.2 Emergency procedures** 

Unprotected persons must be kept away.

Evacuate personnel to safe areas. Provide adequate ventilation.

Avoid dust formation. Avoid breathing dust.

Avoid contact with skin, eyes and clothing.

6.3 Methods and materials used for containment

Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

6.4 Cleanup procedures

Do not let product enter drains. Use mechanical handling equipment.

Clean contaminated surface thoroughly.

Pick up and arrange disposal without creating dust.

Use a suitable vacuum cleaner.

## 7. HANDLING AND STORAGE

7.1 Precautions for safe

Handle with care.

handling

Wear personal protective equipment. Use only in well-ventilated areas.

Avoid dust formation.

Provide exhaust ventilation if dust is formed.



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Dust must be extracted directly at the point of origin.

Avoid breathing dust.

Avoid contact with skin, eyes and clothing.

**7.2** Conditions for safe storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

Containers should be protected against falling down.

Containers which are opened must be carefully resealed and kept upright to

prevent leakage.

Store away from incompatible substances.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **8.1 Occupational Exposure Limits**

ACGIH Nuisance dust limit of 10mg/m³ (inhalable) and 3mg/m³ (respirable) may apply to this product. Exposure limit values of the components:

#### 8.2 OSHA-Permissible Exposure Limit (PEL)

Exposure limit values of the components:

Component / CAS	8H (OSHA, PEL)
	mg/m³
Quartz (SiO2)	Total dust: 30 mg/m <sup>3</sup> / %SiO2+2 (OSHA Z-3)
CAS N°: 14808-60-7	Respirable: 10 mg/m³ / %SiO2+2 (OSHA Z-3)
	Respirable: 250 mppcf / %SiO2+5 (OSHA Z-3)
Limestone	Total dust: 15 mg/m³ (OSHA Z-1)
CAS N°: 1317-65-3	Respirable: 5 mg/m³ (OSHA Z-1)
Particulates Not Otherwise	Total dust: 15 mg/m³ (OSHA Z-1)
Regulated (PNOR):	Respirable: 5 mg/m³ (OSHA Z-1)
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#### **8.3 Engineering Controls**

Provide exhaust ventilation if dust is formed. Dust must be extracted directly at the point of origin. Apply technical measures to comply with the occupational exposure limits.

#### **8.4 Personal Protective Equipment**

Hand protection: Wear gloves and protective clothing to prevent repeated or prolonged skin contact.

**Eye protection**: Wear eye protection, safety glasses or goggles, to avoid possible eye contact.

**Body protection**: Long sleeved clothing

Respiratory protection: A NIOSH approved air purifying respirator with a type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed if workplace conditions warrant a respirator use.



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<u>Hygiene measures</u>: Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use. Keep working clothes separately.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information of basic physical and chemical properties

Appearance (physical state, Solid

colour, etc.)

Odour No data available

Odour threshold Not applicable

pH Not applicable

Melting point/freezing

point;

Not applicable

Boiling point Not applicable

Boiling Range Not applicable

Flash point No data available

Evaporation rate Not applicable

Flammability Not flammable

Upper/lower flammability

or explosive limits

No data available

Oxidising properties No data available

Vapor pressure Not applicable

Vapor density Not applicable

Density 67 lb/ft<sup>3</sup>

Solubility in water No data available

Other Solvents No data available

Partition coefficient (n-

octanol/water)

No data available

Auto ignition temperature No data available

Decomposition

temperature

No data available



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Viscosity Not applicable

### 10. STABILITY AND REACTIVITY

**10.1 Reactivity** Stable under recommended storage conditions.

**10.2 Chemical stability** Stable under recommended storage conditions.

10.3 Possibility of hazardous

reactions

Hazardous polymerization does not occur.

**10.4 Conditions to avoid** Avoid heat and sunlight.

**10.5 Incompatible materials** Strong acids, alkalis and oxidizing agents.

10.6 Hazardous decomposition

products

If heated to the point of decomposition, carbon monoxide, carbon dioxide, oxides of nitrogen and other undefined products of organic combustion may

be released.

#### 11. TOXICOLOGICAL INFORMATION

11.1 Measures of Toxicity

Acute toxicity: Not classified.

Skin corrosion/irritation: Skin contact may cause irritation.

Serious eye damage/irritation: Eye contact may cause irritation.

Respiratory or skin sensitisation: May cause respiratory irritation.

Chronic effects: This product contains crystalline silica. Excessive inhalation of respirable

crystalline silica mays cause silicosis, a progressive, disabling and fatal disease of the lung. Symptoms may include cough, shortness of breath, wheezing and

reduced pulmonary function.

11.2 Listed in IARC or

considered carcinogen by NTP

or OSHA

The international Agency for Research on Cancer (IARC), in Monograph 68 has concluded that crystalline silica inhaled in the form of quartz or cristobalite, from occupational sources is carcinogenic to humans (Group 1). The National Toxicology Program (NTP) classifies crystalline silica as a known carcinogen.

**11.3 Further information** Not applicable.

#### 12. ECOLOGICAL INFORMATION

**12.1 Toxicity** Not classified



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12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential No

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

Not applicable.

## 13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods to employ

Recover or recycle if possible. Properly characterize all waste materials. Consult federal, state/provincial and local regulations regarding the proper disposal of this material. Prevent material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Empty containers should be taken to an approved waste handling site for recycling or disposal.

13.2 Description of appropriate disposal containers to use

No data available

13.3 Description of the physical and chemical properties that may affect disposal activities

No data available

13.4 Language discouraging sewage disposal.

No data available

13.5 Any special precautions for landfills or incineration

activities

No data available

### 14. TRANSPORT INFORMATION

UN Number	
UN proper shipping name	
Transport hazard classes	
Packing group	



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Environmental hazards	
Guidance On transport	
Special precautions for	

## 15. REGULATORY INFORMATION

#### National and/or regional regulatory information of the chemical or mixtures

Inventories:

US. Toxic Substances Control Act: No data available

NTP, IARC, OSHA:

The international Agency for Research on Cancer (IARC), in Monograph 68 has concluded that crystalline silica inhaled in the form of quartz or cristobalite, from occupational sources is carcinogenic to humans (Group 1). The National Toxicology Program (NTP) classifies crystalline silica as a known carcinogen.

### 16. OTHER INFORMATION

#### Indications on the revision

First edition: 27/11/2015

#### Abbreviations and acronyms used

CAS No.: Chemical Abstract Service Number

UN N°.: United Nations Number

#### Methods of evaluation for the classification of mixtures

The classification of the mixture was set based on the regulation (US) HazCom 1910.1200 [HCS 2012].

### Other information

This information is based on our present knowledge and is provided according to the relevant national regulations. This information is intended as a characterization of the product in order to provide guidance for the relevant safety issues. However, this document does not provide any warranty, expressed or implied, regarding the properties of the product.