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1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY UNDERTAKING

1.1 Product identifier

Product name 15-0-30 Methydure

1.2 Relevant use of the product

Applications Fertilizer

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

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

 Skin Irrit. 2
 H315

 Eye Irrit. 2A
 H319

 STOT SE 3
 H335

 Carc. 1
 H350

 STOT RE 1
 H372

2.2. Danger symbols





2.3. Signal word Danger

2.4. Hazard statements H315 Causes skin irritation.

H319 Causes eye irritation.

H335 May cause respiratory irritation.

H350 May cause cancer

H372 May cause damage to organs (lungs) through prolonged or repeated

exposure if inhaled.

2.5. Precautionary

statements

Prevention P201 Obtain special instructions before use.



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

understood.

P260 Do not breathe dust.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. 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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

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

P362+P364 Take off contaminated clothing and wash it before reuse.

P314 Get medical advice/attention if you feel unwell.

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

	Chemical name	CAS-Nr.	Concentration %
Potassium sulfate		7778-80-5	C = 56.6 %
MU	Urea formaldehyde polymer (95 % - 100 %)	9011-05-6	C = 18.8 %
	Urea (< 5 %)	57-13-6	
	Dye (< 1 %)	Proprietary	
Urea mixture	Carbamide, Carbonyldiamide, Carbamidic Acid) (97.5% - 99.7%)	57-13-6	C = 16.3 %
	Alkalinity as ammonia (150 ppm max)		
	Methylenediurea (0 % - 2.5 %)	13547-17-6	
	Biuret (0% -1.5%)	108-19-0	
Calcitic lime	Limestone (>=80 - <=100%)	1317-65-3	C = 8.3 %
	Quartz (SiO ₂) (20%)	14808-60-7	

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4. FIRST AID MEASURES

4.1 First Aid measures after Inhalation

Following inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing

is difficult, give oxygen. Use oxygen as required, provided by a qualified

operator. 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 Induce vomiting, but only if victim is fully conscious. Never give anything by

mouth to an unconscious person. Drink 1 or 2 glasses of water. Do not give

milk or alcoholic beverages. Call a physician.

4.5 Most important symptoms and effects, both acute and delayed

INHALATION Respiratory irritation.

SKIN Causes skin irritation

EYES Causes serious eye irritation

INGESTION May be harmful if a large quantity has been ingested: Abdominal pain.

Diarrhea. Nausea. Vomiting. May cause drowsiness and loss of

coordination.

4.6 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media <u>Suitable</u>:

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

environment.

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

Large fires: Water spray, fog or foam.

Unsuitable: None known.

5.2 Special hazards arising from chemical or mixture during the fire

Container may rupture on heating. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Explosive reactions with oxidizing agents such as potassium chlorate and/or peroxides. In case of fire hazardous decomposition products may be produced such as:

- Sulphur oxides
- Ammonia
- Carbon monoxide



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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,

Wear personal protective equipment.

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.

Do not let product enter drains.

6.4 Clean-up procedures

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.

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 ACGIH-Threshold Limit Value (TLV)

Exposure limit values of the components:

Respirable crystalline silica dust: ACGIH TLV® = 0,025 mg/m³

Calcium carbonate: ACGIH TLV® = 10 mg/m³

8.2 OSHA-Permissible Exposure Limit (PEL)



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Exposure limit values of the components:

Component / CAS	TLV, 8H (OSHA, PEL)	
	mg/m³	
Quartz (SiO2)	Total dust: 30 mg/m³ / %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)	

8.3 Any other exposure limit used or recommended by chemical manufacturer

Non applicable

8.4 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.

8.5 Personal Protective Equipment

Hand protection: Gloves

Gloves must be inspected prior to use. Replace when worn.

Eye protection: Do not wear contact lenses.

Wear as appropriate: Safety glasses with side-shields

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.

<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, colour, etc.) Multicolored granules, solid

Odour Odourless



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Odour threshold Not applicable

No data available рΗ

Melting point/freezing

point;

No data available

Not applicable **Boiling point**

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

No data available Oxidising properties

Vapour pressure Not applicable

Vapour density No data available

Density 69 lbs./ft3

Solubility in water Partially soluble

Other Solvents No data available

Partition coefficient (n-

octanol/water)

No data available

Auto ignition temperature No data available

Decomposition

temperature

No data available

Viscosity Not applicable

10. STABILITY AND REACTIVITY

Not reactive under normal storage and handling condition 10.1 Reactivity

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous

reactions

Hazardous polymerization does not occur.



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10.4 Conditions to avoid Keep at temperatures below 5374 °F (190 °C)

10.5 Incompatible materials Strong oxidizing agents, Chlorates and Hypochlorites

10.6 Hazardous decomposition

products

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen fluoride.

Hydrogen chloride. Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 Measures of Toxicity

Acute toxicity: Not classified

Skin corrosion/irritation: May irritate skin through mechanical abrasion

Serious eye damage/irritation: May cause eye irritation

Respiratory or skin sensitisation: No data available

11.2 Listed in IARC or considered carcinogen by NTP or OSHA

Quartz (SiO₂) CAS N°: 14808-60-7 Group 1 (IARC), Volume 68, 100C

11.3 Further information This product contains prismatic tremolite (e.g., cleavage fragments) as an

impurity. Sufficient exposure to respirable prismatic tremolite dust may

cause serious lung problems.

12. ECOLOGICAL INFORMATION

12.1 Toxicity May be toxic to aquatic life. In sufficient quantity may deplete oxygen

required by aquatic life. May cause eutrophication of ponds and lakes.

Potassium sulfate:

Toxicity to fish: LC50: 653 mg/l Exposure time: 96 h

Species: Lepomis macrochirus

Toxicity to daphnia and other aquatic invertebrates:

EC50: 2900 mg/l (Exposure time:72h)

Species: Desmodesmus subspicatus (green algae)Silica:

Toxicity to Algae and Crustacea

IC50: 440 mg/L (Exposure time: 72 Hours)



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Species: Algae

EC50: 7600 mg/L (Exposure time: 48 Hours)

Species: Daphnia magna

Carbonate calcium:

Toxicity to fish: LC50: > 10000 mg/l Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates:

EC50: > 1000 mg/l (Exposure time: 48 h) Species: *Daphnia magna* (Water flea)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil No data available

12.5 Other adverse effects

May release ammonium ions that are toxic to fish. Un-ionized ammonia concentrations above 0.02 mg/l are considered toxic in fresh water. May release phosphates which will result in algae growth, increased turbidity, and depleted oxygen. At extremely high concentrations, this may be hazardous to fish or other marine organisms. Release to watercourses may cause effects downstream. Fish 96 hour LC50, OECD Guidelines 203 (rainbow trout): >86mg/L.

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.



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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	
Environmental hazards	
Guidance On transport in bulk	
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

OSHA Hazards: Carcinogen

<u>Clean Air Act:</u> This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

16. OTHER INFORMATION

Indications on the revision

First edition: 08/10/2015

Addition of all fields as required by regulation (US) HCS 1910.1200 [HCS 2012]. Update of the classification information and update of related sections accordingly.

Abbreviations and acronyms used

ACGIH: American conference of governmental and industrial hygienist

CAS N°.: Chemical Abstract Service Number

CFR: Code of Federal Regulations

EC50: Half maximal effective concentration HCS: Hazard communication standard



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LC50: Half maximal lethal concentration

LD50: Half maximal lethal dose

OSHA: Occupational safety and health administration STOT SE: Specific target organ toxicity Single exposure STOT RE: Specific target organ toxicity Repeated exposure

UN No.: United Nations Number

Methods of evaluation for the classification of mixtures

The classification of the mixture was set based on the regulation (US) HCS 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.