1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY UNDERTAKING

1.1 Product identifier

Product name

13-20-20 Methydure

1.2 Relevant use of the product

Applications Fertilizers

1.3 Manufacturer, Importer or Responsible Party

Name Address	FERTI TECHNOLOGIES 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)

Acute Tox. 5	H303
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
STOT SE 3	H335

- 2.2. Danger symbols
- 2.3. Signal word

2.4. Hazard statements H303 May be harmful if swallowed

H315 Causes skin irritation H319 Causes eye irritation

Warning

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.

P261 Avoid breathing fume/dust/gas/mist/vapors/spray.

Description of any	Not applicable
Disposal	P501 Dispose of contents/container according to local regulations.
	P405 Store locked up.
Storage	P403+P233 Store in a well ventilated place. Keep container tightly closed.
	P362 + P364 Take off contaminated clothing and wash it before reuse.
	P362 Take off contaminated clothing
	P337+P313 If eye irritation persists: get medical attention/advice.
	P332+P313 If Skin irritation occurs get medical attention/advice.
	P321 Take any precaution to avoid mixing with combustibles.
	P312 Call a POISON CENTER/doctor if you feel unwell.
	P308+P313 If exposed or concerned: Get medical advice/attention.
	Remove contact lenses, if present and easy to do. Continue rinsing.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minute
	for breathing.
·	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable
Response	P302+P352 IF ON SKIN: Wash with plenty of water
	protection.
	P280 Wear protective gloves/protective clothing/eye protection/face
	P271 Use only outdoors or in a well-ventilated area.
	P270 Do not eat, drink or smoke when using this product.
	P264 Wash hands thoroughly after handling.

- 2.6. Description of any hazards not otherwise Not applicable. classified
- 2.7. % ingredient(s) with unknown acute toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name		CAS-Nr.	Concentration %
Potassium sulfate (99 % - 100 %) 7778-80-5 C =		C = 39.6 %	
MAP	Monobasic ammonium phosphate (70% - 90%)	7722-76-1	C 28.4.9/
11-52-0	Ammonium sulfate (5.5% - 7.5%)	7783-20-2	C = 38.4 %
	Urea formaldehyde polymer (95 % - 100 %)	9011-05-6	
MU	Urea (< 5 %)	57-13-6	C = 22.0 %
	Dye (< 0.1 %)	Proprietary	

4. FIRST AID MEASURES

4.1 First Aid measures after Inhalation Following inhalation Remo

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

SAFETY DATA SHEET

13-20-20 Methydure

Following skin contact 4.3 First Aid measures after Eve	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.	
4.5 First Ald medsures are Eye		
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 a	and effects, both acute and delayed	
INHALATION	May cause respiratory irritation.	
SKIN	Causes skin irritation.	
EYES	Causes serious eye irritation.	
INGESTION	May cause stomach distress, nausea or vomiting	

4.6 Indication of any immediate medical attention and special treatment needed

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. <u>Unsuitable</u> : Not applicable.	
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: - 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,	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	Do not flush into surface water or sanitary sewer system.
used for containment	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 handling	Handle with care. 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 - TWA_TLV

Component / CAS	TLV, 8H (ACGIH)
	mg/m ³
MAP	Total Respirable: 5 mg/m ³
CAS N°: 7722-76-1	Total Inhalable: 15 mg/m ³
	Dust: 35 mg/m ³
Particulate not otherwise	Inhalable : 10 mg/m ³
classified (PNOC)	Respirable : 5 mg/m ³

8.2 OSHA-Permissible Exposure Limit (PEL)

Exposure limit values of the components:

Component / CAS	8H (OSHA, PEL)
	mg/m ³
МАР	Total Respirable: 5 mg/m ³
CAS N°: 7722-76-1	Total Inhalable: 15 mg/m ³

	Dust: 25 mg/m ³
Particulate not otherwise	Total Respirable: 5 mg/m ³
classified (PNOC)	Total Inhalable: 15 mg/m ³

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.

Eve protection: Do not wear contact lenses. Wear as appropriate: Safety glasses with side-shields

Body protection: Long sleeved clothing

<u>Respiratory protection</u>: 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.)	Granular, white to brown
Odour	Odourless
Odour threshold	Not applicable
рН	No data available
Melting point/freezing point;	No data available
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
Vapour pressure	Not applicable
Vapour density	No data available
Density	63 lbs./ft ³
Density Solubility in water	63 lbs./ft ³ Partially soluble
,	·
Solubility in water	Partially soluble
Solubility in water Other Solvents Partition coefficient (n-	Partially soluble No data available
Solubility in water Other Solvents Partition coefficient (n- octanol/water)	Partially soluble No data available No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity	Reacts violently with strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates causing fire and explosion hazard.
10.2 Chemical stability	Normally stable. May gradually give off ammonia. The product is hygroscopic and will absorb water by contact with the moisture in the air.
10.3 Possibility of hazardous reactions	If heated to the point of decomposition, oxides of phosphorus, oxides of nitrogen and ammonia (NH3) may be released.
10.4 Conditions to avoid	Moisture. High temperatures. Contact with incompatible materials.
10.5 Incompatible materials	Alkaline metals, strong oxidizing agents, strong acids or bases, nitrates, hypochlorites.
10.6 Hazardous decomposition products	If heated to the point of decomposition, oxides of phosphorus, oxides of nitrogen and ammonia (NH3) may be released. Nitrogen oxides; Ammonia; Biuret; Carbon oxides Chlorine.

11. TOXICOLOGICAL INFORMATION

11.1 Measures of Toxicity Acute toxicity:	Ammonium sulfate: LD₅0 oral (Rat) = 3000 mg/m³
Skin corrosion/irritation:	Causes skin irritation
Serious eye damage/irritation:	Causes serious eye irritation
Respiratory or skin sensitisation:	Not a respiratory sensitizer
11.2 Listed in IARC or considered carcinogen by NTP or OSHA	None listed
11.3 Further information	n/a

12. ECOLOGICAL INFORMATION

12.1 Toxicity 12.2 Persistence and degradability	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 Other adverse effects	

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 discouragingsewage 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	
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 IC50: Half maximal inhibitory concentration HCS: Hazard communication standard LC50: Half maximal lethal concentration LD50: Half maximal lethal dose OSHA: Occupational safety and health administration STOT SE: Specific target organ toxicity Single exposure 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) 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.