

### SECTION 1: Identification

#### 1.1. Product identifier

Product form : Mixture  
 Product group : Trade product  
 Registration Number: : 2013043B Fertilizer Act

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

Recommended uses and restrictions : Fertilizers

#### 1.3. Supplier

Alltech Crop Science  
 3031 Catnip Hill Road  
 40356 Nicholasville - USA  
 T 859-885-9613 - F 859-887-6736  
[RegulatoryACS@alltech.com](mailto:RegulatoryACS@alltech.com)

#### 1.4. Emergency telephone number

Emergency number : 1-800-424-9300

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-CA)

Skin corrosion/irritation, Category 2 H315 Calculation method

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-CA labelling

Hazard pictograms (GHS-CA) :



GHS07

Signal word (GHS-CA) :

Warning

Hazard statements (GHS-CA) :

H315 - Causes skin irritation

Precautionary statements (GHS-CA) :

P264 - Wash hands, forearms and face thoroughly after handling  
 P280 - Wear protective clothing  
 P302+P352 - IF ON SKIN: Wash with plenty of water  
 P321 - Specific treatment (see ... on this label)  
 P332+P313 - If skin irritation occurs: Get medical advice/attention  
 P362+P364 - Take off contaminated clothing and wash it before reuse

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-CA)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification (GHS-CA)
LACTOBACILLUS EXTRACT FILTRATE		50 - 80	Not classified
Copper Sulfate	(CAS No) 7758-99-8	10 - 20	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
SACCHAROMYCES CEREVISIAE CELL WALL		10 - 20	Not classified

# Agro-Mos

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Full text of H-statements: see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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

- Symptoms/injuries after skin contact : Irritation.
- Symptoms/injuries after eye contact : Eye irritation.

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

- Other medical advice or treatment : Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Unsuitable extinguishing media

No additional information available

#### 5.3. Specific hazards arising from the hazardous product

- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

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

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

No additional information available

#### 6.2. Methods and materials for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

#### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Storage conditions : Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.

#### 8.3. Individual protection measures/Personal protective equipment

- Hand protection : Protective gloves.
- Eye protection : Safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Environmental exposure controls : Avoid release to the aquatic environment.

# Agro-Mos

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: No data available
Colour	: Green.
Odour	: Unpleasant odour.
Odour threshold	: No data available
pH	: 4.77
pH solution	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: > 100 °C Not applicable
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: 1.188 g/ml
Relative gas density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 27.433 cP
Viscosity, kinematic (calculated value) (40 °C)	: 23.09175084 mm <sup>2</sup> /s
Explosive properties	: No data available.
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosive limit (LEL)	: No data available
Upper explosive limit (UEL)	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Oral: Not classified.
Acute toxicity (dermal)	: Dermal: Not classified.
Acute toxicity (inhalation)	: Not classified

Agro-Mos	
LD50 oral rat	5000 mg/kg
LD50 dermal rat	5000 mg/kg
LC50 inhalation rat (ppm)	2.05 ppm

# Agro-Mos

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Agro-Mos	
ATE CA (oral)	5000.00000000 mg/kg bodyweight
ATE CA (dermal)	5000.00000000 mg/kg bodyweight

LACTOBACILLUS EXTRACT FILTRATE	
LD50 oral rat	> 5000 ml/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (ppm)	2.05 ppm

Copper Sulfate (7758-99-8)	
LD50 oral rat	300 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 482 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature study; OECD 402: Acute Dermal Toxicity)

Skin corrosion/irritation : Causes skin irritation.

pH: 4.77

Serious eye damage/irritation : Not classified

pH: 4.77

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Agro-Mos	
Viscosity, kinematic (calculated value) (40 °C)	23.09175084 mm <sup>2</sup> /s

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

Copper Sulfate (7758-99-8)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

### 12.3. Bioaccumulative potential

Copper Sulfate (7758-99-8)	
Bioaccumulative potential	Bioaccumable.

### 12.4. Mobility in soil

Copper Sulfate (7758-99-8)	
Ecology - soil	Toxic to flora.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

No additional information available

## SECTION 14: Transport information

# Agro-Mos

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### 14.1. Basic shipping description

In accordance with TDG

#### TDG

UN-No. (TDG)	: UN3082
Packing group	: III - Minor Danger
TDG Primary Hazard Classes	: 9 - Class 9 - Miscellaneous Products, Substances or Organisms
Transport document description	: UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Contains copper sulfate) 9, III
TDG Proper Shipping Name	: ENVIRONMENTALY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard labels (TDG)	: 9 - Miscellaneous dangerous substances and articles



TDG Special Provisions	: 16 - 1) The technical name of the most dangerous substance related to the primary class must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(i)(A) of Part 3, Documentation. The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4, Dangerous Goods Safety Marks. 2) subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical: a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S.; b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S.; c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S.; d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.; or e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act" 99 - (1) Mixtures of solids that are not dangerous goods and liquids or solids that are UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., may be handled, offered for transport or transported as UN3077 if there is no visible liquid when the dangerous goods are loaded into a means containment and during transport. (2) These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering for transport or transporting of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety. SOR/2014-306 UN3077, UN3082 SOR/2014-306
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E1

### 14.2. Transport information/DOT

#### DOT

DOT NA no.	: UN3082
UN-No.(DOT)	: 3082
Packing group (DOT)	: III - Minor Danger
DOT Symbols	: G - Identifies PSN requiring a technical name
Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s. (contains copper sulfate), 9, III
Proper Shipping Name (DOT)	: Environmentally hazardous substances, liquid, n.o.s. (contains copper sulfate)
Contains Statement Field Selection (DOT)	: DOT_TECHNICAL - Proper Shipping Name - Technical (DOT)
Class (DOT)	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Division (DOT)	: 9

# Agro-Mos

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



Marine pollutant : • Marine pollutant

Dangerous for the environment : No

DOT Special Provisions (49 CFR 172.102) : 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies  
146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination  
173 - An appropriate generic entry may be used for this material  
335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leakproof when used as bulk packaging  
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672)  
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / (1 + a (tr - tf))$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling  
TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP

DOT Packaging Exceptions (49 CFR 173.xxx) : 155

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : No limit

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : No limit

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel

Emergency Response Guide (ERG) Number : 171

Other information : No supplementary information available.

### 14.3. Air and sea transport

#### IMDG

UN-No. (IMDG) : 3082

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class (IMDG) : 9 - Miscellaneous dangerous substances and articles

Packing group (IMDG) : III - substances presenting low danger

# Agro-Mos

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Limited quantities (IMDG) : Shipping information on Agro-Mos. Per the IMDG code: (2.10.2.7) environmentally hazardous substances of 5L or less in a container is shipped as a non-hazardous material and will not be labeled or packaged as hazardous. The transport of marine pollutants is not subject to any other provisions of the IMDG code relevant to marine pollutants (no marking, labelling or documentation required) provided: The net mass or net quantity per single packaging or inner packaging of combination packagings does not exceed 5 kg for solids and 5 L for liquids; The packagings meet the general provisions of paragraphs 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 of the IMDG code (strong rigid packaging). In the case of marine pollutants also meeting the criteria for inclusion in another hazard class all provisions of the IMDG code relevant to any additional hazards continue to apply.  
This means that: UN 3077 Environmentally hazardous substances solid n.o.s. in quantities of less than 5 kg per single packaging or inner packaging of combination packaging; and • UN 3082 Environmentally hazardous substances liquid, n.o.s. in quantities of less than 5 L per single packaging or inner packaging of combination packaging can be shipped as not subject to the provisions of the IMDG code. For marine pollutants, which also have other hazards, no marine pollutant mark is required on the packages or on the container in which they are packed, but all other provisions of the IMDG code continue to apply. Because of this change, containers with dangerous goods in limited quantities which are also marine pollutants do not need to bear the Marine Pollutant mark.

### IATA

UN-No. (IATA) : 3082  
Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Class (IATA) : 9 - Miscellaneous Dangerous Goods  
Packing group (IATA) : III - Minor Danger

## SECTION 15: Regulatory information

### 15.1. National regulations

No additional information available

### 15.2. International regulations

#### LACTOBACILLUS EXTRACT FILTRATE

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Copper Sulfate (7758-99-8)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

## SECTION 16: Other information

Date of issue : 15/04/2016  
Revision date : 15/04/2016  
Supersedes : 28/03/2013

Full text of H-statements:

H301	Toxic if swallowed
H315	Causes skin irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS Canada (GHS)

*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*