Page 1 of 7

First issue: February 1, 2019

Revised:

Product Name: 12-0-0 Ca-Fortify

Version: 1.0

SAFETY DATA SHEET

This document is prepared in compliance with OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: 12-0-0 Ca-Fortify

General Use: Fertilizer

Product Description: Ammonium nitrate-based fertilizer SDS

MANUFACTURER

Company Name: Beanstalk Ag

Address : PO Box 6623, Santa Rosa, CA 95406

Telephone No. : (707) 819-0187

EMERGENCY TELEPHONE NUMBER:

: (707) 819-0187

2. SUMMARY OF HAZARDS AND TOXICITIES

GHS CLASSIFICATION

PHYSICAL AND CHEMICAL HAZARDS

Flammable solid
Phyrophoric solid
Oxidizing solid
Corrosive to metal
Not classified
Not classified
Not classified

HEALTH HAZARDS

Acute toxicity(oral) Not classified Not applicable Acute toxicity(skin) Not classified Acute toxicity(inhalation) **Classification 2 Dermal corrosion /irritation Classification 2A** Serious eye damage / irritancy Not applicable Respiratory sensitivity Skin sensitivity Not applicable Not classified Germ cell mutagenicity Not applicable Carcinogenicity Not classified Reproductive toxicity

Specific target organ systemic

toxicity (Single exposure)
Specific target organ systemic

Classification 2 (blood), Classification 3 (respiratory tract)

toxicity (Repeated exposure)

Aspiration hazard Not classified Not applicable

ENVIRONMENTAL HAZARDS

Page 2 of 7

First issue: February 1, 2019

Revised:

Product Name: 12-0-0 Ca-Fortify

Version: 1.0

SAFETY DATA SHEET

:Not classified

Acute hazardous to the aquatic environmental Chronic hazardous to the aquatic environmental

:Not classified

GHS LABEL ELEMENT

PICTOGRAM



SIGNAL WORD : Warning

HAZARD STATEMENT(s):

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation Harmful if inhaled.

PRECAUTIONARY STATEMENT(s):

Avoid breathing dust, fume, gas, mist, vapors or spray.

Wash hands and skin thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Wear protective gloves.

Wear eye protection/face protection.

IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF

IN EYES: Rinse cautiously with water for several minutes.

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

Call a POISON CENTRE/doctor if you feel unwell.

Rinse mouth.

If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off

contaminated clothing and wash it before reuse.

Dispose of contents/container in accordance with local, regional,

national and international regulations.

Page 3 of 7

First issue: February 1, 2019

Revised:

Product Name: 12-0-0 Ca-Fortify

Version: 1.0

SAFETY DATA SHEET

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a compound fertilizer coated with polyolefin type resin.

Chemical Composition (Typical Analysis)

| Chemical Name | wt% | CAS No. | Chemical Formula |
|------------------|-------|------------|-------------------------------|
| Calcium Nitrate | 65-75 | 10124-37-5 | Ca(NO3) 2 |
| Ammonium Nitrate | NMT10 | 6484-52-2 | NH4NO3 |
| Calcium Sulfate | NMT10 | 7778-18-9 | CaSO ₄ |
| Polyolefin *1 | NMT10 | - | - |
| Talc | NMT10 | 14807-96-6 | 3MgO-4SiO2 • H ₂ O |

^{*1} Polyolefin contains polyethylene etc.

4. FIRST AID MEASURES

INHALATION: In case of accidental inhalation of fumes from overheating or combustion, move to

fresh air. If needed, seek medical attention.

EYE: In case of dust or granule in the eyes, flush with plenty of running water.

SKIN: Wash thoroughly with soap and water.

INGESTION: If conscious, give plenty of water to drink and provoke vomiting.

If needed, call a doctor.

PROTECTION TO FIRST-AIDs: Not Applicable

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Material is essentially non-flammable. EXTINGUISHING MEDIA: Water FIRE FIGHTING INSTRUCTIONS:

Remove the product from combustible materials as it may support combustion of them. When heated to decomposition, it emits toxic fume of NOx, SOx and ammonia. Remove the product from the source of fire.

If it is difficult to move, flush with plenty of water.

Do not enter fire area without self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Page 4 of 7

First issue: February 1, 2019

Revised:

Product Name: 12-0-0 Ca-Fortify

Version: 1.0

SAFETY DATA SHEET

LAND SPILL: Sweep up and shovel into suitable containers for disposal.

Avoid contact with combustibles. Reuse as fertilizer, if possible.

WATER SPILL: Keep out of water supplies, lakes, ponds, streams and rivers.

7. HANDLING AND STORAGE

HANDLING: Handle in accordance with good industrial hygiene and safety practice.

Avoid mixing with fuels, other combustible materials and strong alkaline agents.

STORAGE: The product is hygroscopic and should therefore be stored in a dry place. Store away from reducing agents. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT VALUES: Not Established

EXPOSURE CONTROLS

Occupational Exposure Controls

Engineering Controls: No specific controls are needed.

Personal protection: Normally not required. In extremely dusty conditions,

appropriate protective equipment is recommended.

Respiratory Protection: Dust mask with particle filter Hand

Protection : Rubber gloves Eye Protection : Safety goggles

Skin Protection : Normal clean work clothing

Environmental Exposure Controls Not

Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Solid, Grey granules

Odor
pH Not Applicable
Melting point/Melting range
Decomposition temperature
Flash point Not Available
Not Available
Not Available

Flammability Relative None

Density 1.0 g/cm³ (Bulk Density)

Page 5 of 7

First issue: February 1, 2019

Revised:

Product Name: 12-0-0 Ca-Fortify

Version: 1.0

SAFETY DATA SHEET

Solubility

Fertilizer inside the coating dissolves in water gradually.

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: High Heating. See section 5.

STABILITY: Stable

MATERIALS TO AVOID: Strong alkaline agents

HAZARDOUS REACTIONS/ DECOMPOSITION PRODUCTS:

Nitrogen oxides (NOx), Ammonia

11. TOXICOLOGICAL INFORMATION

Acute toxicity(oral) :Not classified

Have the following harmful information with the following components.

<Ammonium nitrate>

Rat LD50 value: 2217mg / kg (RTECS, 2005, IUCLID, 2000), 2800mg / kg,

2462mg / kg, 2950mg / kg, 5600mg / kg, 4820mg / kg (IUCLID, 2000) and Based on the 4500mg / kg (HSDB, 2005), we have applied the calculation. The calculated values 2798mg / kg. Therefore, we have determined Not Classified.

Acute toxicity(skin) :Not classified No data

Acute toxicity(inhalation) :Not classified No data

Dermal corrosion / irritation Classification 2

Have the following harmful information with the following components.

<Ammonium nitrate>

Skin irritation in the test using the rabbit of IUCLID (2000) was not observed. Although there is a description that, ICSC (J) (2001), HSDB (2005), HSFS (1998) and SITTIG (4th, 2002) report specific cases which are not shown in skin but it stimulates the skin, it was classified as Classification 2.

Serious eye damage / irritancy Classification 2A

Have the following harmful information with the following components.

<Ammonium nitrate>

The eye irritation defined by ECETOC TR 48 (1992) eye irritation test is not observed but it is reported that it irritates eyes by ICSC (J) (2001), HSDB (2005), HSFS (1998), SITTIG (2002), it was classified as Classification 2A.

Page 6 of 7

First issue: February 1, 2019

Revised:

Product Name: 12-0-0 Ca-Fortify

Version: 1.0

SAFETY DATA SHEET

Respiratory sensitivity :Not classified No data

Skin sensitivity : Not classified No data

Gem cell mutagenicity :Not classified No data

Carcinogenicity :Not classified No data

Reproductive toxicity :Not classified No data

Specific target organ systemic toxicity (Single exposure):

Classification 2 (blood), Classification 3 (respiratory tract) Have

the following harmful information with the following components.

<Ammonium nitrate>

Because the observation of methemoglobinemia in the rat oral administration test was reported by RRECS (2005), and it was reported that methemoglobin or abnormal hemoglobin are produced in the ICSC (J) (2001), HSDB (2005), HSFS (1998) and SITTIG (4th, 2002), it is determined that the blood is the target organ, it was classified as Classification 2. In addition, since there are descriptions of irritating to the respiratory tract by ICSC (J) (2001), HSDB (2005), HSFS (1998) and SITTIG (4th, 2002), it was classified as Classification 3.

Specific target organ systemic toxicity (Repeated exposure): Not classified.

Aspiration hazard :Not classified No data

ENVIRONMENTAL HAZARD

Acute hazardous to the aquatic environmental: Not classified

Have the following harmful information with the following components.

<Ammonium nitrate>

Because of fish 96-hour LC50 = 5657mg / L26 of the (rainbow trout)) data, it was not classified.

Chronic hazardous to the aquatic environmental: Not classified

Have the following harmful information with the following components.

<Ammonium nitrate>

Since the acute toxicity is out of classification (acute toxicity is low), it was not classified.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Large amounts of product released to water systems will be harmful to aquatic plant and animal life.

PERSISTENCE AND DEGRADABILITY:

Page 7 of 7

First issue: February 1, 2019

Revised:

Product Name: 12-0-0 Ca-Fortify

Version: 1.0

SAFETY DATA SHEET

Fertilizer granules are soluble in water and biodegradable. Coating materials are persistent and not biodegradable.

BIOACCUMULATIVE POTENTIAL: Not available.

13. DISPOSAL CONSIDERATIONS

Safe disposal methods: Uncontaminated product may be reused as fertilizer. Classify waste under applicable federal, state and local regulations.

Do not dump this product into sewers, on the ground or into any body of water.

14. TRANSPORT INFORMATION:

Since the situations may be difference case by case and the description below may not always apply, please consult 49 CFR or other regulations for dangerous goods for additional description requirement (e.g. technical name) and mode- or quantity- specific shipping requirements.

DOT: Land -Not regulated

Air -Not regulated

Vessel - Not regulated

IMDG: -Not regulated

ICO/IATA: -Not regulated

TDG: - Not regulated

15. REGULATORY INFORMATION OSHA

STATUS: 29 CFR 1910.1200.

TSCA STATUS: see 2. COMPOSIT ION/INFORMATION ON INGREDIENTS CERCLA REPORTABLE QUANTITY (40CFR117,302): None SARA TITLE M

SECTION 302 (40 CFR 355) :None

SECTION 311/312 (40 CFR 370)

- 1. Immediate (Acute) Health Effect; No
- 2. Delayed (Chronic) Health Effect; No
- 3. Fire Hazard; No
- 4. Sudden Release of Pressure Hazard; No
- 5. Reactivity Hazard: No

SECTION 313 (40 CFR 372) :None