SAFETY DATA SHEET

1. Identification

Product identifier CannAg 30-10-10

Recommended use Agricultural / Horticultural Use - Micronutrient Fertilizer - Refer to product label

Recommended restrictions Refer to product label

Manufacturer

Company Name CannAg Inc.

1904 United Way, Suite #106

Medford, OR 97504

Telephone During Business Hours 1-541-973-2244

Emergency phone number CHEMTREC (24 hours): 1-800-424-9300

USA, Canada, Puerto Rico 1-800-424-9300 Virgin Islands 1-703-527-3887

International Maritime

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Serious eye damage/eye irritation Category 2A

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if swallowed. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear

eye/face protection.

Response If swallowed: Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water

for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse

mouth. If eye irritation persists: Get medical advice/attention.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Material name: Brandt 30-10-10 Micro 905 Version #: 01 Issue date: 11-06-2015

Chemical name	Common name and synonyms	CAS number	%
Urea		57-13-6	50 - < 60*
Potassium Nitrate		7757-79-1	20 - < 30*
Manganese EDTA, disodium salt		15375-84-5	< 1*
Other components below reportable le	evels		20 - < 30

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a Inhalation

physician if symptoms develop or persist.

irritation.

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Get medical advice/attention if you feel unwell. Get medical attention if symptoms occur. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye

Most important symptoms/effects, acute and

Ingestion

delayed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Indication of immediate medical attention and special treatment needed General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions Use water spray to cool unopened containers.

Specific methods General fire hazards Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Minimize dust generation and accumulation. Prevent entry into waterways, sewer. basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not taste or swallow. Avoid breathing dust. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Practice good housekeeping.

Store in original tightly closed container. Keep container tightly closed. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR1910.1000)

ComponentsTypeValueManganese EDTA,Ceiling5 mg/m3

disodium salt (CAS 15375-84-5)

US. NIOSH: Pocket Guide to Chemical Hazards

ComponentsTypeValueFormManganese EDTA,
disodium salt (CAS
15375-84-5)STEL3 mg/m3Fume.

TWA 1 mg/m3 Fume.

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides
Components

Type

Value

Form

Urea (CAS 57-13-6)

TWA

10 mg/m3

Total particulate.

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Face shield is recommended. Wear safety glasses with side shields (or goggles). Usetight fitting

goggles if dust is generated.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Solid. Powder.

Other Wear suitable protective clothing.

Respiratory protection Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels

exceeding the exposure limits. Respiratory protection not required.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Form

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash

work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Powder.

Physical state Solid.

Color Light blue
Odor Not available.
Odor threshold Not available.
PH Not available.
Salt-Out / Crystallization Temp Not available.
Melting point/freezing point Not available.
Initial boiling point and boiling range

Flash point

Evaporation rate

Flammability (solid, gas)

Not available.

Not available.

Not available.

Not available.

Flammability limit - lower Not a

Not available.

(%)

Material name: Brandt 30-10-10 Micro

SDS US

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%)

Not available. Not available.

Not available.

Explosive limit - upper (%) Not available. Vapor pressure Not available. Vapor density

Relative density Solubility(ies)

Solubility (water) Not available. **Partition coefficient** Not available.

(n-octanol/water)

Not available.

Auto-ignition temperature Not available. **Decomposition temperature Viscosity** Not available.

10. Stability and reactivity

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

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

Conditions to avoid

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion Harmful if swallowed.

Prolonged inhalation may be harmful. Inhalation of dusts may cause respiratory irritation. Inhalation

No adverse effects due to skin contact are expected. Skin contact

Eye contact Causes serious eye irritation. Dust in the eyes will cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye

8471 mg/kg

irritation.

Rat

Information on toxicological effects

Acute toxicity Harmful if swallowed. Not known.

Product	Species	Test Results
CannAg 30-10-10		
Acute		
Oral		
LD50	Rabbit	4696.8403 mg/kg estimated
	Rat	13794.4219 mg/kg estimated
	Sheep	52465.3164 mg/kg estimated
Components	Species	Test Results
Potassium Nitrate (CAS 775	7-79-1)	
Acute		
Oral		
LD50	Rabbit	1166 mg/kg
Urea (CAS 57-13-6)		
Acute		
Oral		

LD50

Components **Species Test Results** Sheep 28500 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

Causes serious eye irritation. Dust in the eyes will cause irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

Not classified.

single exposure

Specific target organ toxicity -

Not classified.

repeated exposure

Not available.

Aspiration hazard Chronic effects

Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity 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. **Product** Species **Test Results**

	opecies	i est ivesuits
EC50	Daphnia	9224.8994 mg/l, 48 hours estimated
LC50	Fish	2694.0879 mg/l, 96 hours estimated
	Species	Test Results
3 7757-79-1)		
LC50	Bluegill (Lepomis macrochirus)	1200 mg/l, 96 hours
LC50	Fish	1378 - 3000 mg/l
EC50	Water flea (Daphnia magna)	3910 mg/l, 48 hours
LC50	Carp (Leuciscus idus melanotus)	> 10000 mg/l, 48 hours
	Guppy (Poecilia reticulata)	16200 - 18300 mg/l, 96 hours
	Harlequinfish, red rasbora (Rasbora heteromorpha)	12000 mg/l, 96 hours
	Mozambique tilapia (Tilapia mossambica)	590 - 730 mg/l, 96 hours
	LC50 77757-79-1) LC50 LC50	EC50 Daphnia LC50 Fish Species 77757-79-1) LC50 Bluegill (Lepomis macrochirus) LC50 Fish EC50 Water flea (Daphnia magna) LC50 Carp (Leuciscus idus melanotus) Guppy (Poecilia reticulata) Harlequinfish, red rasbora (Rasbora heteromorpha) Mozambique tilapia (Tilapia

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Not available. Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Urea -2.11

No data available. Mobility in soil

905 Version #: 01 Issue date: 11-06-2015

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Manganese EDTA, disodium salt (CAS 15375-84-5) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986(SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.Potassium Nitrate7757-79-120 - < 30</td>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Manganese EDTA, disodium salt (CAS 15375-84-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Potassium Nitrate (CAS 7757-79-1)

Material name: Brandt 30-10-10 Micro 905 Version #: 01 Issue date: 11-06-2015

US. New Jersey Worker and Community Right-to-Know Act

Manganese EDTA, disodium salt (CAS 15375-84-5)

Potassium Nitrate (CAS 7757-79-1)

US. Pennsylvania Worker and Community Right-to-Know Law

Potassium Nitrate (CAS 7757-79-1)

US. Rhode Island RTK

Manganese EDTA, disodium salt (CAS 15375-84-5)

Potassium Nitrate (CAS 7757-79-1)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

16. Other information, including date of preparation or last revision

Issue date 11-06-2015

Version # 01

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of Manufacturer's knowledge, information and belief at the date of its publication; however, it is provided only as a guidance for safe handling, use, processing, storage, transportation, disposal and release of the Product. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made with respect to the Product or the information provided herein, or that the Product or information herein may be used without infringing the intellectual property rights of others. The information provided in this Safety Data Sheet relates only to the specific Product designated and may not be valid if the Product is used in combination with other materials or in any other process, unless specified herein. The user assumes all risk and liability for loss, injury, damage or expense due to any use, handling, storage or disposal of the Product, and Manufacturer recommends that the user conducts its owns tests of the Product to determine suitability of the Product for user's particular use.

Material name: Brandt 30-10-10 Micro SDS US