Safety Data Sheet

Section 1 Product Information

Product Name: Endure 18-0-3 STD, .20 MALLET, 40%UMAXX, MOP Product Code: 2019160

Spring Valley 800-635-2123

1891 Spring Valley Rd. Jackson, WI 53037

Product Use: Granular blended fertilizer for general horticulture use.

Not recommended for: Not recommended for use in or around bodies of water.

Section 2 Hazards

GHS Ratings:

Eye corrosive 2A Eye irritant: Subcategory 2A, Reversible in 21 days

Carcinogen 1B Presumed Human Carcinogen, Based on demonstrated animal

carcinogenicity

GHS Hazards

H319 Causes serious eye irritation

H350 May cause cancer

GHS Precautions

P201 Obtain special instructions before use

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

P264 Wash ... thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P281 Use personal protective equipment as required

P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact

lenses if present and easy to do – continue rinsing

P308+P313 IF exposed or concerned: Get medical advice/attention P337+P313 If eye irritation persists, get medical advice/attention

P405 Store locked up

P501 Dispose of contents/container in accordance with local, state, and federal laws.

Signal Word: Danger





Delayed, immediate and chronic effects of exposure: None expected.

Section 3 Composition

Exact percentages of components are withheld as a trade secret.

Chemical Name	CAS number	Weight Concentration %
Dolomite granules	16389-88-1	
Urea Granular	57-13-6	

SDS for: 2019160 Page 1 of 7

Biodac	Biodac	
Potassium Chloride	7447-40-7	
N-(n-Butyl)thiophosphoric triamide	94317-64-3	

(1) Nuisance limit

Section 4 First Aid

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most Important symptoms/effects, acute and delayed: None expected.

Indication of Immediate medical attention and special treatment if needed: For ingestion there is no specific antidote available. Treat symptomatically

Section 5 Fire Fighting

Flash Point: N/A

LEL: UEL:

Flammability Limits: Not determined

Extnguishing Media: Watier, carbon dioxide, dry chemical or ftoam

Unusual Fire and Explosion Hazards: Ift watier is used too ftghti ftre, contiain runoft, using dikes too preventi contiamination oft watier supplie Dispose oft ftre contirol water latter

Hazardous Decompositon Materials (Under Fire Conditions): May produce gases such as hydrogen chloride, hydrogen cyanide, and oxides oft carbon and nitirogen

Special Fire Fighting Procedures: Protect eyes and skin from contact with smoke. Wear self contained breathing apparatus when fighting fires. Keep all nonessential personnel upwind form smoke. Contain runoff waters and consult with your local environmental agencies before disposal.

Special Fire Fighting Procedures: Fireftghtiers should wear NIOSH/MSHA approved selft-contiained breatihing apparatius and ftull ftre-ftghting tiurn outi gear ito preventi runoft and contiamination oft watier sources Dispose oft ftre contirol watier latier

Section 6 Accidental Release Measures

Cleanup procedures: Sweep spill, repackage in labeled container and reuse.

Section 7 Handling and Storage

HANDLING AND STORAGE Harmftul ift absorbed tihrough skinHarmftul ift inhaledAvoid contiacti witih skin, eyes, or

SDS for: 2019160 Page 2 of 7

clotihing. Users should wash hands beftore eating, drinking, chewing gum, using tiobacco or using tihe tioile immove clotihing immediatiely ift pesticide getis insidehen wash tihoroughly and puti on clean clotihing Remove Personal Protiective Equipmenti (PPE) immediatiely after handling tihis product/Wash tihe outiside oft gloves beftore removings soon as possible, wash tihoroughly and change intio clean clotihing

STORAGE: Stiore in a cool, dry place and in such a manner as tio preventi cross-contiamination with other pesticides, ftertilizers, ftood and ftee6tiore in original contiainer and outi oft tihe reach oft children, prefterably in a locked stiorage area. Do noti contiaminatie watier, ftood, or fteed by stiorage or disposal

Section 8 Exposure Control and Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Dolomite granules 16389-88-1	Not Established	Not Established	Not Established
Urea Granular 57-13-6	15mg/m^3	Not Established	Not Established
Biodac Biodac	Not Established	Not Established	Not Established
Potassium Chloride 7447-40-7	Not Established	Not Established	Not Established
N-(n-Butyl)thiophosphoric triamide 94317-64-3	5 mg/m3 as dust	Not Established	Not Established

Eye/Face Protecton: To avoid contiacti witih eyes, wear chemical goggles or shielded saftetiy glasseAn emergency eyewash or watier supply should be readily accessible tio tihe work area

Skin Protecton: To avoid contiacti with skin wear long pantis, long-sleeved shirti, socks, shoes and chemical-resistianti gloves. An emergency shower or watier supply should be readily accessible tio tihe work areaRespiratiory Protiection: Noti normally required Ift vapors or mistis exceed acceptiable levels, wear NIOSH approved air-puriftying respiration witih cartiridges/canistiers approved ftor use againsti pesticides

General Hygiene Consideratons: Personal hygiene is an importianti work practice exposure contirol measure and tihe ftollowing general measures should be tiaken when working witih or handling tihis matierial: 1) do noti stiore, use and/or consume ftoods, beverages, tiobacco productis, or cosmetics in areas where tihis matierial is stiored; 2) wash hands and ftace careftully beftore eating, drinking, using tiobacco, applying cosmetics or using tihe tioileti

Section 9 Physical Properties

Appearance Blend of granular pellets.	Odor Slightly earthy	
Physical State Solid Granular	Boiling Range 1420 to 1500 °C	
Specific Gravity (SG) 1.657	Lbs VOC/Gallon Less Water 0.00	

Section 10 Stability and Reactivity

STABLE

Incompatibilities: None known.

SDS for: 2019160 Page 3 of 7

Printed: 1/3/2019 at 3:34:37PM

Hazardous Decomposition: Under fire conditions, may produce gases such as hydrogen chloride, hydrogen cyanide, and oxides of ca nitrogen.

Not Applicable

Hazardous polymerization will not occur.

Section 11 Toxicological Information

Mixture Toxicity Component Toxicity

7447-40-7 Potassium Chloride

Oral LD50: 1,500 mg/kg (rat)

94317-64-3 N-(n-Butyl)thiophosphoric triamide

Oral LD50: 2,823 mg/kg (rat) Dermal LD50: 2,000 mg/kg (rat)

Likely Routes of Exposure: Skin contact, Inhalation, Eye contact

Symptoms of Exposure: None expected.

Skin Contact Eye Contact Ingestion

Not Applicable

Effects of Overexposure

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA

Subchronic (Target Organ) Effects: Repeated overexposure to imidacloprid may affect heart, thyroid, blood chemistry, and liver.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure to imidacloprid can cause effects to the thyroid. Imidacloprid did not cause cancer in laboratory animal studies. The U.S. EPA has given imidacloprid a Group E classification (evidence of non-carcinogenicity in humans).

Reproductive Toxicity: In a two-generation reproduction study in rats, imidacloprid produced reduced mean body weights and body weight gains. No other reproductive effects were observed.

Developmental Toxicity: Rat and rabbit studies on imidacloprid resulted in skeletal abnormalities, increased resorptions (rabbits) and reduced body weight gains at doses that were also toxic to mother animals. Genotoxicity: The imidacloprid mutagenicity studies, taken collectively, demonstrate that imidacloprid is not genotoxic or mutagenic.

CAS Number Description % Weight Carcinogen Rating

SDS for: 2019160 Page 4 of 7

Printed: 1/3/2019 at 3:34:37PM

16389-88-1

Dolomite granules: Limestone (Dolomite granules) is not listed on the NTP, IARC or OSHA lists of carcinogens. Crystalline silica, a naturally occurring component of limestone, is listed by IARC but not by NTP or OSHA. IARC has determined that there is sufficient evidence for carcinogenicity to experimental animals exposed to crystalline silica and limited evidence for carcinogenicity to humans. "Limited evidence" means that a causal relationship is possible; however, other explanations such as chance, bias or confounding factors cannot adequately be excluded. NTP has proposed (1989) to list crystalline silica based on the IARC determination. The quantity of crystalline silica in limestone, being part of a naturally occurring mined material, vary based on where and when the material is mined. As such the exact percentage of crystalline silica in this product cannot be accurately calculated between individual batches of this product. In order to provide our end users with the most relevant safety information and err on the side of caution and in accordance with the GHS standards set forth for crystalline silica stating that any product containing more than 0.1% crystalline silica must be marked with a Carcinogen hazard classification this product bears this mark even in cases where it may not be strictly required.

Section 12 Ecological Information

This product is toxic to aquatic invertebrates.

Ecotoxicity:

Data based on the active ingredient Imidacloprid:

96-hour LC50 Rainbow Trouti: 211 mg/l

Japanese Quail Oral LD50: 31 mg/kg 48-hour EC50 Daphnia: 85 mg/l Bobwhitie Quail Oral LD50: 152 mg/kg 96-hour LC50 Mysid: 0.038 ppm

48-hour Honey Bee Contiacti LD50: 0078 μg/bee

House Sparrow Oral LD50: 41 mg/kg

48-hour Honey Bee Oral LD50: 0.0039 μg/b

Environmental Fate

Hydrolysis half-life of imidacloprid is greater than 30 days at pH 7 and 25 °C. The aqueous photolysis half-life is less

SDS for: 2019160 Page 5 of 7

than 3 hours. The soil surface photolysis of imidacloprid has a half-life of 39 days, and in soil, the half-life ranged from 26 to 229 days.

Component Ecotoxicity

Urea Granular 96 Hr LC50 Poecilia reticulata: 16200 - 18300 mg/L

48 Hr EC50 Daphnia magna: 3910 mg/L [Static]

Section 13 Disposal Considerations

Product Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance If burned stay out of smoke.

Section 14 Transportation

Agency Proper Shipping Name

UN Number

Packing Group Hazard Class

Not Applicable

Section 15 Regulations

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION. Avoid breathing spray mist. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber, Selection Category A). Keep children and pets off treated area until dry.

Country Regulation All Components Listed

Section 16 Other Information

Hazardous Material Information System (HMIS)

National Fire Protection Association (NFPA)

SDS for: 2019160 Page 6 of 7



HMIS & NFPA Hazard Rating Legend

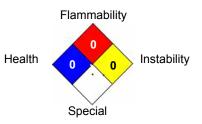
* = Chronic Health Hazard

0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH



The information herein is provided in good faith and believed to be accurate as of the effective date shown above . However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

Reviewer Revision

Date Prepared: 1/3/2019

SDS for: 2019160 Page 7 of 7