

## *Compost De-Thatcher*

### Section 1 - IDENTIFICATION

#### 1.1. Product Identifier

**Product name:** Compost De-Thatcher 15-0-0 Plus Microbes & Enzymes  
**Synonym:** For all types of Nursery, Greenhouse, Pre-Plant & Transplant Soils or Soilless Media

#### 1.2. Recommended Use / Restrictions

**Identified Uses:** For soil conditioning & remediation  
**Restrictions:** N/A

#### 1.3. Supplier Details

**Company:** Growth Products, Ltd.  
80 Lafayette Avenue  
White Plains, NY 10603-1603 USA  
+011 914-428-1316 (9 am - 5 pm EST Mon - Fri)  
questions@growthproducts.com

#### 1.4. Emergency Telephone Number

**Emergency Telephone:** +011 914-428-1316 (9 am - 5 pm EST Mon - Fri)

### Section 2 - HAZARD(S) IDENTIFICATION

#### 2.1. Classification of substance or mixture

**Target Organs:** Skin, Lungs, Respiratory System & Eyes  
**Physical Hazards:** N/A  
**Health Hazards:** STOT SE 3 – H335  
Skin Sensit. 1B – H317  
Eye Irrit. 2B – H320

#### Environmental Hazards:

#### 2.2. Label Elements

##### Pictogram(s):



**Signal Word:** WARNING!

**Hazard Statements:** H317 May cause an allergic skin reaction  
H320 Causes eye irritation  
H335 May cause respiratory irritation

**Precautionary Statements:** P261 Avoid breathing dust/fume/gas/mist/vapours/spray  
P264 Wash face, hands and any exposed skin thoroughly after handling  
P271 Use only outdoors in a well-ventilated area  
P272 Contaminated work clothing should not be allowed out of the workplace  
P280 Wear protective gloves/ protective clothing/eye protection/ face protection  
P302+P352 IF ON SKIN: Wash with plenty of water  
304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

**Precautionary Statements Continued:**

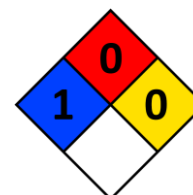
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P312 Call a POISON CENTER or doctor if you feel unwell  
 P333+P313 If skin irritation occurs: Get medical advice/attention  
 P326+P364 Take off contaminated clothing and wash it before reuse  
 P337+P313 If eye irritation persists. Get medical advice/attention  
 P403 +P233 Store in a well-ventilated place. Keep container tightly closed  
 P405 Store locked up  
 P501 Dispose of contents/container in accordance with local/regional/international regulations.

### 2.3. Other Hazards

This product does not contain any substance classified as PBT or vPvB

### NFPA Ratings

<b>Health:</b>	<b>1</b>	Slightly hazardous
<b>Flammability:</b>	<b>0</b>	Will not burn
<b>Reactivity:</b>	<b>0</b>	Stable
<b>Specific Hazard:</b>	<b>N/A</b>	Not applicable



### HMIS Ratings

<b>Health:</b>	<b>1</b>	Serious hazard
<b>Flammability:</b>	<b>0</b>	Minimal hazard
<b>Reactivity:</b>	<b>0</b>	Slight hazard
<b>Personal (PPE):</b>	<b>C</b>	Goggles, Gloves, Protective apron

<b>Health</b>	<i>minor</i>	<b>1</b>
<b>Flammability</b>	<i>minimal</i>	<b>0</b>
<b>Physical Hazard</b>	<i>minimal</i>	<b>0</b>
<b>Personal Protection</b>		<b>C</b>

## Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

Chemical Name	CAS Registry No.	REACH No.	ENECS No.	Classification
Urea:	57-13-6	01-2119463277-33	200-315-5	GHS-US Skin Irrit. 2 – H315 Eye Irrit. 2A - H320 STOT SE 3 – H335
Methylene diurea:	13547-17-6	-	-	GHS Eye Irrit. 2A – H319
Dried bacillus subtilis:	68038-70-0	-	-	No need for classification according to GHS criteria for this product
Yucca schidigera:	223749-05-1	-	-	GHS-US Eye Irrit. 2B – H320 Skin Irrit. 3 – HH316
Kelp extract:	69235-69-4	-	-	Nontoxic

## Section 4 - FIRST-AID MEASURES

### 4.1. Description of first-aid measures

**Inhalation:** Move affected person to fresh air at once and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention/advice.

**Ingestion:** **Do not induce vomiting!** Never give anything by mouth to an unconscious person. If conscious, rinse mouth thoroughly with water. If conscious, give water. Get medical attention/advice in symptoms persists.

- Skin Contact:** Flush with plenty of water for at least 15 minutes and take off all contaminated clothing. Get medical attention/advice if irritation persists.
- Eye Contact:** Rinse cautiously with plenty of water for at least 15 minutes and seek medical attention/advice if irritation persists.
- 4.2. Most important symptoms and effect, both acute and delayed**
- Inhalation:** May cause respiratory irritation. There may be irritation of the throat with a feeling of tightness in the chest.
- Ingestion:** Ingestion may cause nausea, vomiting and severe stomach and digestive irritation/burns. There may be soreness and redness of the mouth and throat.
- Skin Contact:** Skin contact may cause redness and irritation, dermatitis. Prolonged or repeated skin contact can result in the development of allergy-like skin reactions (e.g. rashes, dermatitis and to individuals allergic to fish)
- Eye Contact:** There may be irritation and redness. Profuse watering of the eyes.
- 4.3. Indication of any immediate medical attention and special treatment needed**
- Notes for doctor:** No specific recommendations. If in doubt, get medical attention promptly. Treatment may vary with the condition of victim and specifics of incident.
- Specific treatments:** Eye bathing equipment should be available on the premises. Provide quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

## Section 5 - FIREFIGHTING MEASURES

### 5.1. Extinguishing media

**Suitable extinguishing media:** The product is not considered flammable. Use fire-extinguishing media suitable for the surrounding environment.

**Unsuitable extinguishing media:** N/A

**Environmental Hazards:** Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards arising from the chemical:** N/A

**Hazardous combustion products:** Product components under conditions of fire may produce Ammonia; Nitrogen oxides; Biuret. Do not inhale smoke and gases. (See also Stability and Reactivity section).

### 5.3. Advice for firefighters

**Protective actions during firefighting:** No specific firefighting precautions known, Irritant, non-flammable, water soluble. Do not inhale gases created by fire Do not allow run-off from firefighting to enter drains or watercourses.

**Special protective equipment for firefighters:** Wear self-contained, NIOSH approved breathing apparatus and full protective clothing, including eye protection and boots.

## Section 6 - ACCIDENTAL RELEASE MEASURES

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

**Personal precautions:** Wear protective clothing as described in Section 8 of this safety data sheet.

### 6.2. Environmental precautions

**Environmental precautions:** Avoid the spillage or runoff entering drains, sewers or watercourses. Any release into the environment may be subject to federal/national or local reporting requirements.

### 6.3. Methods and material for containment and cleanup

**Methods for cleaning up:** Stop leak if possible without risk. Contain and absorb spillage with sand, earth or other noncombustible material. Transfer to a suitable container for disposal. Clean surfaces thoroughly with plenty of water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations. Avoid the spillage or runoff entering drains, sewers or watercourses.

**6.4 Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

**Section 7 - HANDLING AND STORAGE**

**7.1. Precautions for Safe Handling**

**Using precautions:** Provide adequate ventilation. Avoid spilling, Avoid contact with skin and eyes. Wash hands thoroughly after handling.

**Advice on general occupational hygiene:** Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas.

**7.2. Conditions for Safe Storage, Including Any Incompatibilities**

**Storage precautions:** Store closed in original container in a dry, cool and well-ventilated place. Store at temperatures above 5°C. Keep away from incompatible materials. Keep away from food, drink and animal feeding stuffs.

**7.3. Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

**Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1. Control Parameters**

**Occupational exposure limits**

Material	Type	Value	Source
Urea (CAS 57-13-6):	ACGIH TWA OSHA PEL (TWA)	10 mg/m <sup>3</sup> – inhalation particulate 5 mg/m <sup>3</sup> – Respirable (particulate)	USA ACGIH USA OSHA
Methylene diurea (CAS 13547-17-6):	N/A	N/A	N/A
Dried bacillus subtilis (CAS 68038-70-0):	N/A	N/A	N/A
Yucca schidigera (CAS 223749-05-1):	N/A	N/A	Not listed in IFA database
Kelp extract (CAS 69235-69-4):	N/A	N/A	N/A

**8.2. Exposure controls**

**Protective equipment**

**General information:** Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

**Appropriate engineering controls:** Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas to keep below nuisance dust limit of 15 mg/m<sup>3</sup>

**Eye / face protection:** Use chemical splash-type goggles / safety glasses. Have eye wash station available in immediate vicinity.

**Hand protection:** For hand protection, wear approved impermeable gloves. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.

**Other skin and body protection:** For body protection wear impervious clothing such as an approved splash protective suit, protective apron. Have emergency shower in immediate vicinity. Wash contaminated clothing before reuse. Handle in accordance with good hygiene and safety practices

**Hygiene measures:** Avoid breathing vapors, mist or gas. Clean water should be available for washing in case of eye or skin contamination.

**Respiratory protection:** If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)).

**Environmental exposure controls:** Eye bathing equipment should be available on the premises. Provide quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available. Ensure adequate ventilation, especially in confined areas.

Equipment:

HMIS Letter:

**C**

**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**
**9.1. Information on basic physical and chemical properties**

<b>Physical State:</b>	Liquid	<b>Evaporation Rate:</b>	Same as water
<b>Color:</b>	Brown	<b>Boiling Point:</b>	About 210°F / 199°C
<b>Odor:</b>	Organic Odor	<b>Freezing Point:</b>	24°F / -4°C
<b>Weight per Gallon / Liter:</b>	10.4# @ 70°F / 1.24 Kg @ 21°C	<b>Viscosity:</b>	8-35 cps @ 21 Degrees C
<b>Storage Life at 70F:</b>	>2 years	<b>Flash Point/Method:</b>	Noncombustible
<b>pH – 21C:</b>	7-8	<b>Vapor Pressure:</b>	N/A
<b>Solubility:</b>	Completely miscible	<b>Storage Temperature:</b>	Above 40°F / 4°C

**Section 10 - STABILITY AND REACTIVITY**

- 10.1. Reactivity:** Keep away from reducing agents, strong bases, organics, combustible material, and oxidizable materials. Avoid heating this substance.
- 10.2. Chemical Stability:** Stable under normal conditions. Decomposes on heating. Stable under recommended storage conditions.
- 10.3. Possibility of Hazardous Reactions:** Contact with organic substances may cause fire or explosion. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.
- 10.4. Conditions to Avoid:** Excessive heat; Contamination; Exposure to UV-rays; pH variations. Store out of direct light.
- 10.5. Incompatible Materials**  
**Materials to avoid:** Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.
- 10.6. Hazardous Decomposition Products:** Oxygen which supports combustion. Liable to produce overpressure in container.

**Section 11 - TOXICOLOGICAL INFORMATION**
**11.1. Information on Toxicological Effects**
**Toxicological effects:**

<b>Acute toxicity Dermal LD<sub>50</sub>:</b>	0.5 ml dosage level (rabbit)
<b>Acute toxicity Oral LD<sub>50</sub>:</b>	5000 mg/kg dosage level (rat)
<b>Acute toxicity Inhalation LD<sub>50</sub>:</b>	N/A
<b>Chronic Toxicity:</b>	N/A

**Symptoms:** Dust, fume, gas, vapors, mists, can cause upper airway irritation, inflammation of the nose, hoarseness, shortness of breath, and a sensation of burning or tightness in the chest. Prolonged exposure to concentrated dust, fume, vapor or to dilute solutions can cause irritation, especially to individuals allergic to fish. Exposure to dust, fume, gas, vapor, mist can cause stinging pain and tearing of eyes.

**Teratogenicity:** N/A

**Mutagenicity:** This product is not recognized as mutagenic by Research Agencies. In vivo tests did not show mutagenic effects.

**Embryotoxicity:** N/A

**Specific Target Organ Toxicity:** N/A

**Reproductive Toxicity:** No toxicity to reproduction in animal studies.

**STOT SE:** Not Classified

**STOT RE:** Not Classified  
**Target Organs:** Eyes, Lungs, Respiratory System, Skin  
**Respiratory Sensitization:** N/A  
**Skin Sensitization:** Moderately irritating  
**Carcinogenicity**  
**IARC:** N/A      **NTP:** N/A      **ACGIH:** N/A      **OSHA:** N/A

**Section 12 - ECOLOGICAL INFORMATION**
**Ecotoxicity**

**12.1. Toxicity:** Not expected to have significant environmental effects

**12.2. Persistence and degradability:** Degradable

**Persistence and Degradability:**

**12.3. Bioaccumulative potential:** Not bioaccumulative

**Partition coefficient:**

**12.4. Mobility in Soil:** Will likely be mobile in the environment due to its water solubility.

**12.5. Results of PBT and vPvB Assessment:** Not listed in EIS PBT List.

**12.6. Other Adverse Effects:** N/A

**Section 13 - DISPOSAL CONSIDERATIONS**
**13.1. Waste Treatment Methods**

**Disposal methods:** Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product, residue and/or container. Product as shipped Section 13

**Section 14 - TRANSPORTATION INFORMATION**

**General:** Product is a non-regulated material; not flammable, not corrosive, not explosive and not radioactive.

In accordance with DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA

Regulatory Information	14.1 UN Number	14.2 Proper Shipping Name	14.3 Class(es)	14.1 Packing Group	14.5 Environmental Hazard	14.6 Special Precautions For User	Additional Information
ADR / RID Class	Not regulated for transportation	Not regulated	Not regulated	Not regulated	Not classified as marine pollutant	N/A	N/A
ADNR Class	Not regulated for transportation	Not regulated	Not regulated	Not regulated	Not classified as marine pollutant	N/A	N/A
IMDG Class	Not regulated for transportation	Not regulated	Not regulated	Not regulated	Not classified as marine pollutant	N/A	N/A
IATA class	Not regulated for transportation	Not regulated	Not regulated	Not regulated	Not classified as marine pollutant	N/A	N/A

**14.7. Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code:** N/A

**Section 15 - REGULATORY INFORMATION**
**15.1. Safety, health and Environmental Regulations / Legislation Specific for the Substance or Mixture**

**EU legislation:** Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).  
Commission Regulation (EU) No 453/2010 of May 2010.

**Clean Water Act:** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)



**CERCLA / EPCRA:** This material, as supplied, is not subject to the Comprehensive Response Compensation and Liability Act (CERCLA) or as an extremely hazardous substance (EHS) under the Emergency Planning and Community Right to Know Act (EPCRA) / Superfund Amendments and Reauthorization Act (SARA).

**Section 16 - OTHER INFORMATION**

**REVISED DATE: 20 December 2016**

**Other Precautions:**

**Read entire label before using**

**Abbreviations / Acronyms:**

N/E	Not Established	N/A	Not applicable
ACGIH	American Conference of Governmental Industrial Hygienists		
TLV	Threshold Limit Values		
PEL	Permissible Exposure Limit		
REL	Recommended Exposure Limit		
OSHA	Occupational Safety and Health Administration		
NIOSH	National Institute for Occupational Safety and Health		
TWA	Time Weighted Average over 8 hours of work		
TLV	Threshold Limit Value over 8 hours of work		
REL	Recommended Exposure Limit		
PEL	Permissible Exposure Limit		
STEL	Short Term Exposure Limit during x minutes		
IDLH	Immediately Dangerous to Life or Health		
TSCA	Toxic substance Control Act (United States)		
DSL	Domestic Substance List (Canada)		
EINECS	European Inventory of Existing Commercial Chemical Substances (Europe)		
ELINCS	European List of Notified Chemical Substances (Europe)		
ENCS	Existing Chemical Substances		
IECSC	Inventory of Existing Chemical Substances		
KECL	Korea Existing Chemicals Inventory		
PICCS	Philippines Inventory of Chemical and Chemical Substances		
AICS	Australian Inventory of Chemical Substances		
NZIoC	New Zealand Inventory of Chemicals		
HMIS	Hazardous Material Identification System (American Coatings Association)		
NFPA	National Fire Protection Association		
PBT	Persistent Bioaccumulative and Toxic		
vPvB	Very Persistent and very Bioaccumulative		
STOT SE	Specific Target Organ Toxicity; Single Exposure		
STOT RE	Specific Target Organ Toxicity; Repeated Exposure		
GER-MAK	Germany Maximum Workplace Concentration		
DOT	Department of Transportation		
TDG	Transportation of Dangerous Goods (Canada)		
ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road		
RID	Regulations Concerning the International Carriage of Dangerous Goods by Rail (EU)		
ADNR	Regulation for the Carriage of Dangerous Substances on Waterways (EU)		
IMDG	International Maritime Dangerous Goods		
ICAO	International Civil Aviation Organization		
IATA	International Air Transport Association		

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