**GERMINATION STANDARDS**

Seeding vigor, germination and endophyte levels are all affected by the conditions in which seed is stored. Germination may decline after the first year if good storage conditions are not maintained. To maintain the highest seed quality, do not store seed in high heat and humidity.

<table>
<thead>
<tr>
<th>Seed Name</th>
<th>Storage Life (Years)</th>
<th>Preferred Minimum % Germination</th>
<th>Preferred Minimum % Purity</th>
<th>Days to Germinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall Fescue</td>
<td>3</td>
<td>85+</td>
<td>97+</td>
<td>14-21</td>
</tr>
<tr>
<td>Kentucky Bluegrass</td>
<td>3</td>
<td>75+</td>
<td>98+</td>
<td>21-30</td>
</tr>
<tr>
<td>Perennial Ryegrass</td>
<td>3</td>
<td>90+</td>
<td>95+</td>
<td>7-10</td>
</tr>
<tr>
<td>Fine Fescue</td>
<td>1.5</td>
<td>80+</td>
<td>97+</td>
<td>14-21</td>
</tr>
<tr>
<td>Creeping Bentgrass</td>
<td>4</td>
<td>85+</td>
<td>98+</td>
<td>14-21</td>
</tr>
</tbody>
</table>

* Storage life can be longer under ideal situations.

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**HOW TO READ AN ANALYSIS TAG**

Each lot of seed is uniquely numbered. This number appears on all documents so that it can be traced back to its origin.

- **PURE SEED — PURITY**: The % by weight of seed that is the named species.
- **CROP**: The % by weight of seed that is other than the pure species labeled, but not considered weeds in your state. Crop seeds must be listed by name if over 5% of content.
- **INERT**: The % by weight of material that will not grow.
- **WEED**: The % of weeds in this lot. A list of problem weeds in your state is available upon request.

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PennMulch® Seed Accelerator is a pelleted fiber mulch developed and patented by Penn State University and made from recycled newspaper. It is the only seed establishment that contains our patented Moisture Cell Technology®, superabsorbent co-polymer that holds up to 400% its weight in water. PennMulch® reduces drying, improving germination 36% with better stand uniformity and density. PennMulch® contains a full rate of starter fertilizer eliminating the need for another application and ensuring that your seeds get off to a great start.

**PennMulch® SEED ACCELERATOR**

- Easy-to-apply pellets expand when watered
- Saves on labor and equipment
- Completely weed-free
- Enhanced germination — 36% more grass
- Instant green, provides professional look
- Unlike straw, doesn’t deplete nitrogen and won’t blow away

50# 85-96051 (40/50# per pallet)

Successful seeding starts with PennMulch
PROSCAPE® GRASS SEED LINEUP

The ProScape line of quality seed mixes was developed with one result in mind — your successful seeding. ProScape utilizes many top rated proprietary seed varieties developed by LebanonTurf and produced by the industry’s best growers. When this unparalleled commitment to seed quality is paired with PennMulch® and any of Lebanon’s starter fertilizers, you have a guaranteed recipe for success in your seeding program.

PROSCAPE® UNIVERSITY SELECT MIX
- 35% Charismatic II GLSR Perennial Ryegrass
- 15% Wild Horse Kentucky Bluegrass
- 20% Zinfandel Kentucky Bluegrass
- 40% Ambassador Chewing Fescue
- 25% Charismatic II GLSR Perennial Ryegrass
- 40% Secretariat II GLSR Perennial Ryegrass
- 20% Ambassador Chewing Fescue
- 30% Charismatic II GLSR Perennial Ryegrass
- 20% Oro Verde Tetraploid Ryegrass
- 10% Zinfandel Kentucky Bluegrass
- 20% Pathfinder Creeping Red Fescue
- 25% Van Gogh Tall Fescue
- 40% Ambassador Chewing Fescue
- 30% Bordeaux Kentucky Bluegrass
- 15% Alfalfa
- 25% Exacta II GLSR Perennial Ryegrass
- 25% Rembrandt Tall Fescue
- 25% Churchill Perennial Ryegrass
- 35% Bordeaux Kentucky Bluegrass
- 30% Timothy
- 25% Van Gogh Tall Fescue

Mixes and prices subject to change without notice. Approximate germination times based on ideal soil temperatures and moisture conditions.

PROSCAPE® SUPERIOR SUN & SHADE MIX
- 30% Charismatic II GLSR Perennial Ryegrass
- 25% Exacta II GLSR Perennial Ryegrass
- 20% Ambassador Chewing Fescue
- 15% Bordeaux Kentucky Bluegrass
- 10% Pathfinder Creeping Red Fescue

Mix of top varieties that excel on any site

New seeding = 6-8 lbs. per 1,000 sq. ft.
Overseeding = 3-4 lbs. per 1,000 sq. ft.
Approx. Germination: 10-21 days
25#  28-54502  50#  28-54503

PROSCAPE® PREMIUM BLUE MIX
- 30% Bordeaux Kentucky Bluegrass
- 30% Charismatic II GLSR Perennial Ryegrass
- 20% Zinfandel Kentucky Bluegrass
- 20% Champagne Kentucky Bluegrass

Quick establishing quality 70/30 Blue mix

New seeding = 4.5-6 lbs. per 1,000 sq. ft.
Overseeding = 3-4 lbs. per 1,000 sq. ft.
Approx. Germination: 10-21 days
25#  28-54501  50#  28-54513

PROSCAPE® LANDSCAPE MIX
- 25% Churchill Perennial Ryegrass
- 25% Affirmed Perennial Ryegrass
- 25% Kentucky Bluegrass 98/85
- 25% Boreal Creeping Red Fescue

Quick establishing and economical all purpose mix

New seeding = 7-8 lbs. per 1,000 sq. ft.
Approx. Germination: 10-21 days
25#  28-54504  50#  28-54505

PROSCAPE® CONTRACTORS MIX
- 40% Annual Ryegrass
- 25% Affirmed Perennial Ryegrass
- 25% Creeping Red Fescue
- 10% Kentucky Bluegrass 98/85

Fast establishing mix for quick cover and perennial turf

New seeding = 8 lbs. per 1,000 sq. ft.
Approx. Germination: 5-10 days
50#  28-54500

PROSCAPE® SHADY TURF SUPREME MIX
- 40% Ambassador Chewing Fescue
- 30% Charismatic II GLSR Perennial Ryegrass
- 20% Pathfinder Creeping Red Fescue
- 10% Oxford Hard Fescue

Provides dense turf stand on shade or low-maintenance sites

New seeding = 8 lbs. per 1,000 sq. ft.
Overseeding = 4 lbs. per 1,000 sq. ft.
Approx. Germination: 7-15 days
25#  28-54508  50#  28-54509

PROSCAPE® LINKS/ECOLOGY MIX
- 40% Pathfinder Creeping Red Fescue
- 40% Ambassador Chewing Fescue
- 20% Oxford Hard Fescue

Low maintenance fine fescue for golf roughs, dense shade and other naturalized areas

New seeding = 4-5 lbs. per 1,000 sq. ft.
Overseeding = 3-4 lbs. per 1,000 sq. ft.
Approx. Germination: 10-16 days
50#  28-54608

PROSCAPE® SPORTSSTURF MIX
- 50% Picasso Tall Fescue
- 20% Rembrandt Tall Fescue
- 20% Exacta II GLSR Perennial Ryegrass
- 10% Zinfandel Kentucky Bluegrass
- May also contain DaVinci Tall Fescue

Drought and disease-resistant mix ideal for heavy-use athletic fields

New seeding = 8 lbs. per 1,000 sq. ft.
Overseeding = 4 lbs. per 1,000 sq. ft.
Approx. Germination: 10-21 days
25#  28-54506  50#  28-54507

PROSCAPE® EQUUS PASTURE MIX
- 25% Kentucky Bluegrass 98/85
- 20% ORO Verde Tetraploid Ryegrass
- 20% Timothy
- 15% Alfalfa
- 15% Wild Horse Kentucky Bluegrass
- 5% White Clover

Pasture mix ideal for horse grazing, contains no endophytes

New seeding = 5.7 lbs. per 1,000 sq. ft.
Overseeding = 3.4 lbs. per 1,000 sq. ft.
Approx. Germination: 7-21 days
25#  28-54614

PROSCAPE® VINTAGE LOW-CUT BLUEGRASS BLEND
- 30% Bordeaux Kentucky Bluegrass
- 30% Zinfandel Kentucky Bluegrass
- 20% Shiraz Kentucky Bluegrass
- 20% Sonoma Kentucky Bluegrass

Elite Bluegrass blend for new and established golf fairways, roughs and athletic fields.

New seeding = 3.4 lbs. per 1,000 sq. ft.
Overseeding = 1-2 lbs. per 1,000 sq. ft.
Approx. Germination: 14-28 days
50#  28-54655
Sod Quality: 50# 28-54656

PROSCAPE® 50/50 BLUE/RYE MIX
- 30% Zinfandel Kentucky Bluegrass
- 30% Bordeaux Kentucky Ryegrass
- 25% Charismatic II GLSR Perennial Ryegrass
- 25% Secretariat II GLSR Perennial Ryegrass

Top rated 50/50 blue/rye mix for athletic turf and home lawns.

New seeding = 4.5 lbs. per 1,000 sq. ft.
Overseeding = 2.4 lbs. per 1,000 sq. ft.
Approx. Germination: 7-21 days
50#  28-54654

PROSCAPE® 80/20 BLUE/RYE MIX
- 80% Zinfandel Kentucky Bluegrass
- 20% Bordeaux Kentucky Ryegrass
- 50% Secretariat II GLSR Perennial Ryegrass
- 50% Charismatic II GLSR Perennial Ryegrass

Ultimate Gray Leaf Spot Resistant Ryegrass blend

New seeding = 6-8 lbs. per 1,000 sq. ft.
Overseeding = 3-4 lbs. per 1,000 sq. ft.
Approx. Germination: 7-12 days
50#  28-54604
50#  28-54605
50# Certified: 28-54607

PROSCAPE® WINNING COLORS™ PLUS
- 30% Van Gogh Tall Fescue
- 30% Rembrandt Tall Fescue
- 20% Monet Tall Fescue
- 10% Cezanne Tall Fescue
- 10% Zinfandel Kentucky Bluegrass

90/10 mix ideal for sod production, athletic fields and home lawns

New seeding = 8 lbs. per 1,000 sq. ft.
Overseeding = 4 lbs. per 1,000 sq. ft.
Approx. Germination: 7-15 days
50#  28-54619
Sod Quality: 50# 28-54618

TRIFECTA™ PERENNIAL RYE BLEND
- 40% Charismatic Perennial Ryegrass
- 30% Affirmed Perennial Ryegrass
- 30% Exacta Perennial Ryegrass
- May also contain Churchill Perennial Ryegrass

Elite disease-resistant blend for golf, athletic fields and home lawns

New seeding = 8-10 lbs. per 1,000 sq. ft.
Overseeding = 3-4 lbs. per 1,000 sq. ft.
Approx. Germination: 7-12 days
25#  28-54604
50#  28-54605
50# Certified: 28-54607

TRIFECTA™ II GLSR PERENNIAL RYEGRASS BLEND
- 40% Secretariat II GLSR Perennial Ryegrass
- 30% Exacta II GLSR Perennial Ryegrass
- 30% Charismatic II GLSR Perennial Ryegrass

Ultimate Gray Leaf Spot Resistant Ryegrass blend

New seeding = 6-8 lbs. per 1,000 sq. ft.
Overseeding = 3-4 lbs. per 1,000 sq. ft.
Approx. Germination: 7-12 days
50#  28-54652

Mixes and prices subject to change without notice. Approximate germination times based on ideal soil temperature and moisture conditions.