

INVITATION TO BID

Bid Invitation Number: #115-2011

Date of Issue: 11/21/2011

Sealed bids will be received in the office of the Division of Central Purchasing, 200 East Main Street, Lexington, Kentucky, until **2:00 PM**, prevailing local time on **12/05/2011**. Bids must be received by the above-mentioned date and time. Mailed bids should be sent to:

Division of Central Purchasing
200 East Main Street, Rm 338
Lexington, KY 40507, (859) 258-3320

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

All bids must have the company name and address, bid invitation number, and the commodity/service on the outside of the envelope.

Bids are to include all shipping costs to the point of delivery located at: Various Locations, Lexington, KY

Bid Security Required: ☐ Yes ☒ No Performance Bond Required: ☐ Yes ☒ No
Cashier Check, Certified Check, Bid Bond (Personal checks and company checks will not be acceptable).

Commodity/Service
Baseball Field Drying Conditioners
See specifications

Check One: <i>Submitted</i> ☐ Bid Specifications Met ☒ Exceptions to Bid Specifications. <i>See attached</i> Exceptions shall be itemized and attached to bid proposal submitted.	Proposed Delivery: <i>3-5</i> days after acceptance of bid. <i>ARO or Sooner</i>
Procurement Card Usage ☐ Yes The Lexington-Fayette Urban County Government will be using Procurement Cards to ☐ No purchase goods and services and also to make payments. Will you accept Procurement Cards?	

Submitted by:

Pennington Seed
Firm *9321 LeSaint Dr*
Address *Fairfield OH 45014*
City, State & Zip

**Bid must be signed:
(original signature)**

Amanda Stewart Government Sales Coor.
Signature of Authorized Company Representative – Title
Amanda Stewart
Representative's Name (Typed or printed)
7007524301
Area Code - Phone - Extension Fax #
astewart@penningtonseed.com
E-Mail Address

The Affidavit in this bid must be completed before your firm can be considered for award of this contract.

AFFIDAVIT

Comes the Affiant, Amanda Stewart Galt Soles, and after being first duly sworn under penalty of perjury as follows: Pennington Seed, Inc

1. His/her name is Amanda Stewart and he/she is the individual submitting the bid or is the authorized representative of

Pennington Seed Inc,

the entity submitting the bid (hereinafter referred to as "Bidder").

2. Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Bidder has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Bidder has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Bidder will not violate any provision of the campaign finance laws of the Commonwealth.

6. Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

7. Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

STATE OF

Georgia

COUNTY OF

Morgan

The foregoing instrument was subscribed, sworn to and acknowledged before me

by

JAN W. LARISCEY

on this the

22nd

day

of

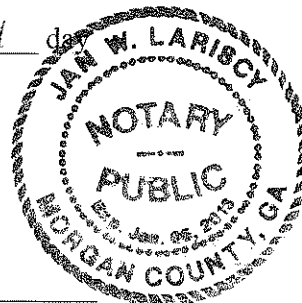
November

, 2011.

My Commission expires:

01/05/13

JAN W. LARISCEY
NOTARY PUBLIC, STATE AT LARGE



Please refer to Section II. Bid Conditions, Item "U" prior to completing this form.

I. GREEN PROCUREMENT

A. ENERGY

The Lexington-Fayette Urban County Government is committed to protecting our environment and being fiscally responsible to our citizens.

The Lexington-Fayette Urban County Government mandates the use of Energy Star compliant products if they are available in the marketplace (go to www.Energystar.gov). If these products are available, but not submitted in your pricing, your bid will be rejected as non-compliant.

ENERGY STAR is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

Key Benefits

These products use 25 to 50% less energy
Reduced energy costs without compromising quality or performance
Reduced air pollution because fewer fossil fuels are burned
Significant return on investment
Extended product life and decreased maintenance

B. GREEN SEAL CERTIFIED PRODUCTS

The Lexington-Fayette Urban County Government is also committed to using other environmentally friendly products that do not negatively impact our environment. Green Seal is a non-profit organization devoted to environmental standard setting, product certification, and public education.

Go to www.Greenseal.org to find available certified products. These products will have a reduced impact on the environment and on human health. The products to be used must be pre-approved by the LFUCG prior to commencement of any work in any LFUCG facility. If a Green Seal product is not available, the LFUCG must provide a signed waiver to use an alternate product. Please provide information on the Green Seal products being used with your bid response.

C. GREEN COMMUNITY

The Lexington-Fayette Urban County Government (LFUCG) serves as a principal, along with the University of Kentucky and Fayette County Public Schools, in the Bluegrass Partnership for a Green Community. The Purchasing Team component of the Partnership collaborates on economy of scale purchasing that promotes and enhances environmental initiatives. Specifically, when applicable, each principal is interested in obtaining best value products and/or services which promote environment initiatives via solicitations and awards from the other principals.

If your company is the successful bidder on this Invitation For Bid, do you agree to extend the same product/service pricing to the other principals of the Bluegrass Partnership for a Green Community (i.e. University of Kentucky and Fayette County Schools) if requested?

Yes X No

II. Bid Conditions

- A. No bid may be withdrawn for a period of sixty (60) days after the date and time set for opening.
- B. No bid may be altered after the date and time set for opening. In the case of obvious errors, the Division of Central Purchasing may permit the withdrawal of a bid. The decision as to whether a bid may be withdrawn shall be that of the Division of Central Purchasing.
- C. Acceptance of this proposal shall be enactment of an Ordinance by the Urban County Council.
- D. The bidder agrees that the Urban County Government reserves the right to reject any and all bids for either fiscal or technical reasons, and to award each part of the bid separately or all parts to one vendor.
- E. Minor exceptions may not eliminate the bidder. The decision as to whether any exception is minor shall be entirely that of the head of the requisitioning Department or Division and the Director of the Division of Central Purchasing. The Urban County Government may waive technicalities and informalities where such waiver would best serve the interests of the Urban County Government.
- F. Manufacturer's catalogue numbers, trade names, etc., where shown herein are for descriptive purposes and are to guide the bidder in interpreting the standard of quality, design, and performance desired, and shall not be construed to exclude proposals based on furnishing other types of materials and/or services. However, any substitution or departure proposed by the bidder must be clearly noted and described; otherwise, it will be assumed that the bidder intends to supply items specifically mentioned in this Invitation for Bids.
- G. The Urban County Government may require demonstrations of the materials proposed herein prior to acceptance of this proposal.
- H. Bids must be submitted on this form and must be signed by the bidder or his authorized representative. Unsigned bids will not be considered.
- I. Bids must be submitted prior to the date and time indicated for opening. Bids submitted after this time will not be considered.
- J. All bids mailed must be marked on the face of the envelope:

"Bid on #115-2011 Baseball Field Drying Conditioners"

and addressed to: Division of Central Purchasing
 200 East Main Street, Room 338
 Lexington, Kentucky 40507

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

- K. Bidder is requested to show both unit prices and lot prices. In the event of error, the unit price shall prevail.
- L. A certified check or Bid Bond in the amount of XX percent of the bid price must be attached hereto. This check must be made payable to the Lexington-Fayette Urban County Government, and will be returned when the material and/or services specified herein have been delivered in accordance with specifications. In the event of failure to perform within the time period set forth

in this bid, it is agreed the certified check may be cashed and the funds retained by the Lexington-Fayette Urban County Government as liquidated damages. Checks of unsuccessful bidders will be returned when the bid has been awarded.

- M. The delivery dates specified by bidder may be a factor in the determination of the successful bidder.
- N. Tabulations of bids received may be mailed to bidders. Bidders requesting tabulations must enclose a stamped, self-addressed envelope with the bid.
- O. The Lexington-Fayette Urban County Government is exempt from Kentucky Sales Tax and Federal Excise Tax on materials purchased from this bid invitation. Materials purchased by the bidder for construction projects are not tax exempt and are the sole responsibility of the bidder.
- P. All material furnished hereunder must be in full compliance with OSHA regulations.
- Q. If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected.
- R. Signature on the face of this bid by the Bidder or his authorized representative shall be construed as acceptance of and compliance with all terms and conditions contained herein.
- S. The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.
- T. The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin;*
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;*
- (3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and*
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.*

The Act further provides:

KRS 45.610. Hiring minorities - Information required

- (1) For the length of the contract, each contractor shall hire minorities from other sources*

within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.

- (2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.*

KRS 45.620. Action against contractor - Hiring of minority contractor or subcontractor

- (1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.*
- (2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.*
- (3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.*

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

It is recommended that all of the provisions above quoted to be included as special conditions in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

- U. Any party, firm or individual submitting a proposal pursuant to this invitation must be in compliance with the requirements of the Lexington-Fayette Urban County Government regarding taxes and fees before they can be considered for award of this invitation and must maintain a "current" status with regard to those taxes and fees throughout the term of the

contract. The contractor must be in compliance with Chapter 13 from the Code of Ordinances of the Lexington-Fayette Urban County Government. The contractor must be in compliance with Ordinance 35-2000 pursuant to contractor registration with the Division of Building Inspection. If applicable, said business must have a Fayette County business license.

Pursuant to KRS 45A.343 and KRS 45A.345, the contractor shall

- (1) Reveal any final determination of a violation by the contractor within the previous five year period pursuant to KRS Chapters 136 (corporation and utility taxes), 139 (sales and use taxes), 141 (income taxes), 337 (wages and hours), 338 (occupational safety and health of employees), 341 (unemployment and compensation) and 342 (labor and human rights) that apply to the contractor; and*
- (2) Be in continuous compliance with the above-mentioned KRS provisions that apply to the contractor for the duration of the contract.*

A contractor's failure to reveal the above or to comply with such provisions for the duration of the contract shall be grounds for cancellation of the contract and disqualification of the contractor from eligibility for future contracts for a period of two (2) years.

- V. Vendors who respond to this invitation have the right to file a notice of contention associated with the bid process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the bid process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the bid process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with bid processes. If, based on this review, a bid process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

III. Procurement Contract Bid Conditions

- A. The terms of this agreement shall be for 1 year from the date of acceptance of this contract by the Lexington-Fayette Urban County Government. This agreement may be extended for an additional 1 year renewal upon the written agreement of the bidder and the Lexington-Fayette Urban County Government. Said agreement must be in writing and must be executed prior to the expiration of the current agreement.
- B. Price Changes (**Space Checked Applies**)
 - (XXX) 1. Prices quoted in response to the Invitation shall be firm prices for the first 90 days of the Procurement Contract. After 90 days, prices may be subject to revision and such changes shall be based on general industry changes. Revision may be either increases or decreases and may be requested by either party. There will be no more than one (1) price adjustment per quarter. Requests for price changes shall be received in writing at least twenty (20) days prior to the effective date and are subject to written acceptance before becoming effective. Proof of the validity of a request for revision shall be responsibility of the requesting party. The Lexington-Fayette Urban County Government shall receive the benefit of any decline that the seller shall offer his other accounts.
 - ☐ 2. No provision for price change is made herein. Prices are to be firm for the term of this contract.
 - ☐ 3. Procurement Level Contract
- C. If any contract item is not available from the vendor, the Lexington-Fayette Urban County Government, at its option, may permit the item to be back-ordered or may procure the item on the open market.
- D. All invoices must bear reference to the Lexington-Fayette Urban County Government Purchasing document numbers which are being billed.
- E. This contract may be canceled by either party thirty (30) days after delivery by canceling party of written notice of intent to cancel to the other contracting party.
- F. This contract may be canceled by the Lexington-Fayette Urban County Government if it is determined that the Bidder has failed to perform under the terms of this agreement, such cancellation to be effective upon receipt of written notice of cancellation by the Bidder.
- G. No substitutions for articles specified herein may be made without prior approval of the Division of Central Purchasing.

EQUAL OPPORTUNITY AGREEMENT

The Law

Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.

Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.

Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.

Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

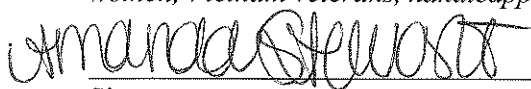
The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.



Signature



Name of Business

Amanda Stewart
Government Sales Coordinator

Lexington-Fayette Urban County Government

Division of Parks and Recreation

Baseball Field Drying Conditioners

The Lexington-Fayette Urban County Government is now accepting bids to establish a price contract for the Division of Parks and Recreation for Baseball Field Drying Conditioners as per the following specifications:

Product #1 Description:

Natural mineral with a blend of Montmorillinite, illite, and amorphous silica. 40% minimum & 60% minimum amorphous silica. Material must be processed via rotary kiln operation at temperatures above 1200 degrees Fahrenheit. Material must be screened and de-dusted.

Stability: Degradation not to be over 5% utilizing ASTM-C88 Sulfate Soundness Test and Static Degradation Test.

Chemical Description:

Si O ₂	74%
Al ₂ O ₃	11%
Fe ₂ O ₃	5%
All other chemicals equal less than 5% and include traces CaO, MgO, K ₂ O, Na ₂ O, and TiO ₂	

Bulk Density: 34 to 36 lbs per cubic feet

Color: Reddish/Brown

Free Moisture: 0.7%

Ph: 5.5% to 7%

Sieve Analysis:

+12	0.1%	-60 to + 100	0.2%
-12 to +16	99.3%	-100	0.1%
-16 to +80	0.1%		
-80 to +100	0.3%		

Product #2 Description:

Diamond Pro ® Infield Conditioner (or equal)

Vitrified clay (expanded shale and clay).

Color: Red

Sieve Size	% Retained	% Passing	Particle Strength	Symbol	Raw Chemical Analysis	Bulk Weight	Cu/Ft. Weight	% Absorption
1/4"	0	100	22,345	SiO ₂	47	1755	65	38
#4	0	100		Al ₂ O ₃	18.88			
#8	10	90		Fe ₂ O ₃	6.66			
#16	40-60	60-40		CaO	8.29			
#30	60-80	40-20		MgO	3.48			
#50	80-90	20-10		TiO ₃				
#100	90-100	10		Cr ₂ O ₃	0.01			
				Mn ₂ O ₃	0.08			
				Na ₂ O	0.55			
				K ₂ O	3			
				SrO	0.01			
				ZnO	0.02			

Pricing:

Pricing should include all shipping costs to point of delivery at 1973 Liberty Rd, Lexington, KY.

Item	Product:	Price per 50 lb. bag
#1	Natural mineral with a blend of Montmorillinite, illite, and amorphous silica. 40% minimum & 60% minimum amorphous silica <i>Turfacer Quick Dry</i>	\$ 6.90
#2	Diamond Pro ® Infield Conditioner (or equal); Vitrified clay (expanded shale and clay) <i>Turfacer Pro League Red Calcined Clay</i>	\$ 10.00

** must order pallet qty or \$300.00*

SPECIAL NOTE TO BIDDER:

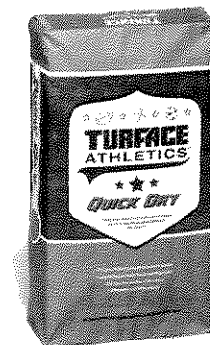
1. This product will be purchased on an "**as-needed**" basis.
2. For questions concerning the above specs contact Cathy Mobley, Division of Parks & Recreation at 859-288-2938.
3. For bidding questions contact Theresa Maynard, Division of Central Purchasing at 859-258-3320 or theresam@lexingtonky.gov.



TURFACE® QuickDry®

After a rain, Turface® QuickDry® makes muddy, slippery conditions a thing of the past. QuickDry will not cake, become slippery or leave an infield rock-hard upon drying. It features easy application as a topdressing during and after rains. Just apply QuickDry to wet areas or puddles, let the product begin to absorb the moisture, and rake the area to return to play time and time again. There is a reason Quick Dry is called the Game Saver!

MANUFACTURER: PROFILE Products LLC
750 Lake Cook Road, Suite 440, Buffalo Grove, IL, 60089
1 800 207 6457



1. Materials: A calcined, non-swelling illite and silica clay.
2. pH range: 6.0 ± 2
3. CEC: 33.6 mEq/100g
4. Particle Stability: Sulfate Soundness testing (ASTM C-88) and static degradation test not to exceed 4% loss over 20 years
5. Bulk Density: $38 \pm 3 \text{ lb./ft}^3$
6. Color Range: Reddish/Tan
7. Packaging: 50 pound valve bags

Quick Dry® SIEVE ANALYSIS:
80% minus 30 Mesh

PRODUCT DESCRIPTION: Must be an illite silica blend at 40% minimum and 60% minimum amorphous silica. Material must be processed in a rotary kiln operation at temperatures not less than 1200 degrees Fahrenheit. Product must then be screened and de-dusted.

INSTALLATION: Pour TURFACE Quick Dry directly into puddles on the infield. Allow Quick Dry to absorb the standing water. Rake the area and smooth Quick Dry into the infield.

CHEMICAL DESCRIPTION:

SiO₂ - 74.0%
Al₂O₃ - 11.0%
Fe₂O₃ - 5.0%

All other chemicals equal less than 5% and include :
CaO, MgO, K₂O, Na₂O and TiO₂



Your Trusted Partner In Soil Solutions™

For product information, visit www.turface.com



TURFACE® PRO LEAGUE® RED

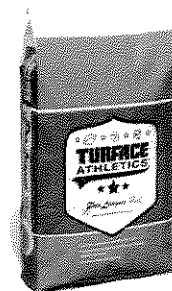
The first and only patented, red calcined clay conditioner, Turface® Pro League® Red combines a rich red color with proven infield conditioning benefits, creating superior sliding and fielding surfaces. As the preferred conditioner of the major leagues, Pro League Red is unmatched for maximum rainout protection and infield coloring.

MANUFACTURER: PROFILE Products LLC
750 Lake Cook Road, Suite 440, Buffalo Grove, IL, 60089
1 800 207 6457

1. Materials: A calcined, non-swelling illite and silica clay
2. Porosity: Total 74%, with 39% Capillary and 35% Non Capillary
3. pH range: 6.0 ± 2
4. CEC: 33.6 mEq/100g
5. Particle Stability: Sulfate Soundness testing (ASTM C-88) and static degradation test not to exceed 4% loss over 20 years
6. Bulk Density: $40 \pm 2 \text{ lb/ft}^3$
7. Color Range: Red
8. Packaging: 50 pound valve bags, 2000 pound super sacks, bulk dump truck loads

Pro League Red® SIEVE ANALYSIS:

	Typical
5 MESH	0.0%
8 MESH	10.4%
16 MESH	68.5%
20 MESH	16.5%
50 MESH	4.5%
PAN	0.1%



PRODUCT DESCRIPTION: Must be an illite silica blend at 40% minimum and 60% minimum amorphous silica. Material must be processed in a rotary kiln operation at temperatures not less than 1200 degrees Fahrenheit. Product must then be screened and de-dusted.

TYPICAL CHEMICAL DESCRIPTION:

SiO₂ - 74%

Al₂O₃ - 11%

Fe₂O₃ - 5%

All other chemicals equal less than 5% and include : CaO, MgO, K₂O, Na₂O and TiO₂

INSTALLATION: Use the following formula to determine the amount of Turface to incorporate into the skinned infield mix. Infields should be amended at 15% to 20% by volume, 4 inches deep.

Turface tons required = area x depth of incorporation (in inches) x desired % of Turface (20% = .2)/667

For example: To determine the amount of TURFACE required to amend an infield skinned area of 9000 sq. ft. at a depth of 4 inches at a 20% volume:

$9000 \times 4 \times .2 / 667 = 10.79 \text{ tons of TURFACE}$

	Regulation Baseball*	Softball	Little League*
	(in tons)	(in tons)	(in tons)
Typical Infield Mix	10	9	3

1 ton per 1000 square feet

*Assumes grass infield; double the amount of Turface if completely skinned.

For higher clay content increase rate by 50%.



Your Trusted Partner In Soil Solutions

For product information, visit www.turface.com