

**Microtracer (tm) 4.5% Selenium on Sand
(10% Sodium Selenite on Sand)**

DESCRIPTION:	A source of selenium for use in manufacturing feed premixes.		
COMPOSITION:	Guaranteed Selenium content not less than 4.5%.		
	Sand		89%
	Sodium Selenite		10%
	High Melting Point Non-GMO Food Grade Soy Bean Oil		1%
	Heavy Metals	Expected Result	Reported Result
	Pb	Not over 50 ppm	0.33 ppm
	As	Not over 12 ppm	1.4 ppm
	Cd	Not over 10 ppm	<0.5 ppm
	Hg	Not over 0.5 ppm	<0.5 ppm
PHYSICAL PROPERTIES:	Color:	Off white to light tan to darker tan. Color will vary somewhat between batches.	
	Odor:	None to slightly salty to very slightly sulfurous	
	Particle Size:	Minimum 100% passes 25 mesh (USA Standard Sieve) – maximum particle size 700 microns with typical particle size 150 microns.	
FEEDING ANIMAL:	The maximum recommended selenium addition level for any animal species is 0.3 parts per million (ppm). This includes for swine (piglets, sows, growing/finishing swine, chickens, turkeys, dairy cattle, beef cattle, calves, sheep, horses, and shrimp).		
EFFICACY:	Selenium as sodium selenite and as sodium selenate is an essential trace element for most species including man. Selenium compounds, however, are extremely toxic at levels as low as 2 parts per million. It is critical that when one adds selenium to feeds the addition be via a premix and that the premix be manufactured with great care that mixing is complete. Workers must also be protected from selenium dust that is a significant work place hazard.		
USAGE AND DOSAGE:	The following is the same for swine, pig starters, growing & finishing, beef cattle, poultry, and goats: The maximum permitted addition of selenium should be 0.3 parts per million. Since this product is 4.5% selenium, a maximum of 6.6 grams		

	may be added per metric tonne of final feed. If a premix is added at 1-kilo per tonne of final feed, then it should be formulated to contain 6/6 grams of this product.
PACKAGING:	25-kgs in gray plastic pails meeting UN specifications for shipping hazardous materials, with poly liner.
STORAGE AND STABILITY:	The shelf life of this product is a minimum of two years if stored at 20° C and 20% relative humidity. The product should not be used if it becomes caked. It then must be resealed and either returned to Mico-Tracers, Inc. or disposed of as extremely hazardous waste.
EXPIRATION DATE:	This product has an expiration date of 3 years from its date of manufacture. This expiration date can be extended based upon re-analysis of samples taken from the otherwise expired lot of product.
PRODUCT ADVANTAGES:	<p>Dispersion: This product disperses well in feed premixes and final feeds. It has a count of approximately 100/mg, of if 0.3 ppm is added to feeds, this product will contribute approximately 75 particles per 10 grams of feed.</p> <p>Less Dusty: This product is approximately 90% less dusty than limestone based selenium sources meeting European Union guidelines applicable to worker safety.</p> <p>Flows Well: This product flows well in materials handling equipment, a major problem as selenium compounds are hygroscopic and may accumulate in premix conveying equipment and may then release into premixes at toxic levels.</p>
PRECAUTIONS:	Sodium selenite is toxic via inhalation, ingestion, or skin contact. When working with this product, wear a dust mask or preferably suitable respirator as well as gloves and other protective work clothing. Wash hands and take shower as soon as possible after working with this product. Refer to applicable MSDS for additional advice.

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