

## **New Jersey Soil, Organics and Trace Elements**

Art. ID	NIST-2706
Unit	50 g
Deliverydetails	No Dangerous Good /not restricted

### **Description**

This Standard Reference Material (SRM) is intended primarily for use in the analysis of selected inorganic constituents, polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), chlorinated dibenzo-pdioxin congeners, and chlorinated dibenzofuran congeners in soils, sediments, or other materials of a similar matrix. NIST-2706 is a natural agricultural soil blended with waste soil materials containing target constituents. A unit of NIST-2706 consists of 50 g of dried, powdered soil. /// Sample value(s) - please ask for current certificate.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified Mass Fraction Value (Dry-Mass Basis)	Aluminium (Al)	[7429-90-5]	2,70 ± 0,19	%		
Certified Mass Fraction Value (Dry-Mass Basis)	Calcium (Ca)	[7440-70-2]	0,588 ± 0,046	%		
Certified Mass Fraction Value (Dry-Mass Basis)	Iron (Fe)	[7439-89-6]	2,22 ± 0,15	%		
Certified Mass Fraction Value (Dry-Mass Basis)	Magnesium (Mg)	[7439-95-4]	0,289 ± 0,014	%		
Certified Mass Fraction Value (Dry-Mass Basis)	Potassium (K)	[7440-09-7]	0,946 ± 0,028	%		
Certified Mass Fraction Value (Dry-Mass Basis)	Silicon (Si)	[7440-21-3]	39,17 ± 0,47	%		
Certified Mass Fraction Value (Dry-Mass Basis)	Sodium (Na)	[7440-23-5]	0,268 ± 0,012	%		
Certified Mass Fraction Value (Dry-Mass Basis)	Titanium (Ti)	[7440-32-6]	0,290 ± 0,042	%		
Certified Mass Fraction Value (Dry-Mass Basis)	Antimony (Sb)	[7440-36-0]	149 ± 11	mg/kg		
Certified Mass Fraction Value (Dry-Mass Basis)	Barium (Ba)	[7440-39-3]	319 ± 43	mg/kg		
Certified Mass Fraction Value (Dry-Mass Basis)	Chromium (Cr)	[7440-47-3]	60,1 ± 5,4	mg/kg		
Certified Mass Fraction Value (Dry-Mass Basis)	Cobalt (Co)	[7440-48-4]	5,99 ± 0,23	mg/kg		
Certified Mass Fraction Value (Dry-Mass Basis)	Copper (Cu)	[7440-50-8]	88,1 ± 6,8	mg/kg		
Certified Mass Fraction	Lead (Pb)	[7439-92-1]	653 ± 36	mg/kg		

Value (Dry-Mass Basis)					
Certified Mass Fraction	Manganese (Mn)	[7439-96-5]	244 ± 15	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Mercury (Hg)	[7439-97-6]	0,1329 ± 0,0033	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Nickel (Ni)	[7440-02-0]	22,8 ± 5,4	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Phosphorus (P)	[7723-14-0]	407 ± 21	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Rubidium (Rb)	[7440-17-7]	37,6 ± 1,9	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Strontium (Sr)	[7440-24-6]	60,3 ± 3,1	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Vanadium (V)	[7440-62-2]	51,9 ± 6,5	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Zinc (Zn)	[7440-66-6]	135,4 ± 6,9	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Zirconium (Zr)	[7440-67-7]	303 ± 25	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Naphthalene	[91-20-3]	15,3 ± 3	mg/kg	Metrologic
Value (Dry-Mass Basis)					
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Certified Mass Fraction	Acenaphthylene	[208-96-8]	0,29 ± 0,12	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Acenaphthene	[83-32-9]	0,013 ± 0,002	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Phenanthrene	[85-01-8]	0,471 ± 0,046	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	4H-cyclopenta[def]phena	[203-64-5]	0,04 ± 0,01	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	anthrene				
Certified Mass Fraction	Fluoranthene	[206-44-0]	0,516 ± 0,066	mg/kg	
Value (Dry-Mass Basis)					
Certified Mass Fraction	Pyrene	[129-00-0]	0,504 ± 0,064	mg/kg	
Value (Dry-Mass Basis)					

Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[ghi]fluoranthene	[203-12-3]	0,071 ± 0,03	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[c]phenanthrene	[195-19-7]	0,058 ± 0,01	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[a]anthracene	[56-55-3]	0,241 ± 0,068	mg/kg	Metrologic al traceab ility is t o the SI d erived uni t of mass fraction.
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[b]fluoranthene	[205-99-2]	0,314 ± 0,052	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[k]fluoranthene	[207-08-9]	0,144 ± 0,042	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[j]fluoranthene	[205-82-3]	0,122 ± 0,018	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[a]fluoranthene	[203-33-8]	0,129 ± 0,06	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[e]pyrene	[192-97-2]	0,332 ± 0,04	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[a]pyrene	[50-32-8]	0,255 ± 0,032	mg/kg	Metrologic al traceab ility is t o the SI d erived uni t of mass fraction.
Certified Mass Fraction Value (Dry-Mass Basis)	Perylene	[198-55-0]	0,074 ± 0,03	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[ghi]perylene	[191-24-2]	0,363 ± 0,06	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Dibenz[a,j]anthracene	[224-41-9]	0,055 ± 0,016	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Dibenz[a,c]anthracene	[215-58-7]	0,049 ± 0,012	mg/kg	
Certified Mass Fraction Value (Dry-Mass Basis)	Dibenz[a,h]anthracene	[53-70-3]	0,055 ± 0,01	mg/kg	

Certified Mass Fraction Value (Dry-Mass Basis)	Benzo[b]chrysene	[214-17-5]	0,064 ± 0,03	mg/kg
Certified Mass Fraction Value (Dry-Mass Basis)	Picene	[213-46-7]	0,076 ± 0,022	mg/kg
Certified Mass Fraction Value (Dry-Mass Basis)	Dibenzo[b,k]fluoranthene	[205-97-0]	0,068 ± 0,012	mg/kg
Certified Mass Fraction Value (Dry-Mass Basis)	Dibenzo[a,e]pyrene	[192-65-4]	0,072 ± 0,006	mg/kg
Certified Mass Fraction Value (Dry-Mass Basis)	Coronene	[191-07-1]	0,064 ± 0,01	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Sulfur (S)	[7704-34-9]	0,217 ± 0,012	%
Reference Mass Fraction Value (Dry-Mass Basis)	Arsenic (As)	[7440-38-2]	30,3 ± 2,7	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Beryllium (Be)	[7440-41-7]	0,84 ± 0,17	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Bismuth (Bi)	[7440-69-9]	0,159 ± 0,012	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Cadmium (Cd)	[7440-43-9]	0,31 ± 0,14	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Cerium (Ce)	[7440-45-1]	34,5 ± 1,7	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Cesium (Cs)		1,35 ± 0,1	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Dysprosium (Dy)	[7429-91-6]	2,41 ± 0,21	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Erbium (Er)	[7440-52-0]	1,45 ± 0,15	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Europium (Eu)	[7440-53-1]	0,602 ± 0,038	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Gadolinium (Gd)	[7440-54-2]	2,63 ± 0,16	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Gallium (Ga)	[7440-55-3]	6,78 ± 0,29	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Holmium (Ho)	[7440-60-0]	0,488 ± 0,052	mg/kg
Reference Mass Fraction Value (Dry-Mass Basis)	Lanthanum (La)	[7439-91-0]	15,5 ± 0,83	mg/kg

Reference Mass Fraction	Lithium (Li)	[7439-93-2]	16,4 ± 1,8	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Lutetium (Lu)	[7439-94-3]	0,219 ± 0,024	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Molybdenum (Mo)	[7439-98-7]	1,211 ± 0,076	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Neodymium (Nd)	[7440-00-8]	14,82 ± 0,73	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Niobium (Nb)	[7440-03-1]	7,18 ± 0,49	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Praseodymium (Pr)	[7440-10-0]	3,99 ± 0,18	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Samarium (Sm)	[7440-19-9]	2,93 ± 0,23	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Scandium (Sc)	[7440-20-2]	4,3 ± 1,1	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Terbium (Tb)	[7440-27-9]	0,39 ± 0,028	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Thallium (Tl)	[7440-28-0]	0,24 ± 0,1	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Thorium (Th)	[7440-29-1]	4,37 ± 0,2	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Thulium (Tm)	[7440-30-4]	0,216 ± 0,02	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Tin (Sn)	[7440-31-5]	36 ± 11	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Tungsten (W)	[7440-33-7]	0,9 ± 0,23	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Uranium (U)	[7440-61-1]	1,38 ± 0,21	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Biphenyl	[92-52-4]	0,06 ± 0,036	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Fluorene	[86-73-7]	0,03 ± 0,01	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Dibenzothiophene	[132-65-0]	0,071 ± 0,062	mg/kg
Value (Dry-Mass Basis)				
Reference Mass Fraction	Anthracene	[120-12-7]	0,06 ± 0,044	mg/kg
Value (Dry-Mass Basis)				

Reference Mass Fraction	Cyclopenta[cd]pyrene	[27208-37-3]	0,052 ± 0,036	mg/kg	
Value (Dry-Mass Basis)					
Reference Mass Fraction	Triphenylene	[217-59-4]	0,132 ± 0,044	mg/kg	
Value (Dry-Mass Basis)					
Reference Mass Fraction	Chrysene	[218-01-9]	0,285 ± 0,074	mg/kg	
Value (Dry-Mass Basis)					
Reference Mass Fraction	Triphenylene + Chrysene	[n/a]	0,345 ± 0,018	mg/kg	Co-elution on ZB-50 chromatography column.
Value (Dry-Mass Basis)					
Reference Mass Fraction	Indeno[1,2,3-cd]pyrene	[193-39-5]	0,31 ± 0,19	mg/kg	
Value (Dry-Mass Basis)					
Information Mass Fraction	Selenium (Se)	[7782-49-2]	0,3	mg/kg	
on Value (Dry-Mass Basis)					
Information Mass Fraction	Silver (Ag)	[7440-22-4]	<1	mg/kg	
on Value (Dry-Mass Basis)					
Information Mass Fraction	Yttrium (Y)	[7440-65-5]	11	mg/kg	
on Value (Dry-Mass Basis)					