

Saint-Gobain Performance Plastics  
Sani-Pro-T Polypropylene

Trace Metal Extractables Polypropylene

A test sample of Sani-Pro-T natural polypropylene tubing was tested for extractables by an outside laboratory. The test was performed using ultra pure water at 80°C for 24 hours to maximize the potential for leaching. The results were found using Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

ELEMENT	DETECTION LIMITS (ppb)	DETECTED (ppb)	ELEMENT	DETECTION LIMITS (ppb)	DETECTED (ppb)
Aluminum (Al)	0.05	<0.05	Neodymium (Nd)	0.02	<0.02
Antimony (Sb)	0.02	<0.02	Nickel (Ni)	0.05	<0.05
Arsenic (As)	0.2	<0.2	Niobium (Nb)	0.02	<0.02
Barium (Ba)	0.01	<0.01	Osmium (Os)	0.02	<0.02
Beryllium (Be)	0.04	<0.04	Palladium (Pd)	0.06	<0.06
Bismuth (Bi)	0.04	<0.04	Platinum (Pt)	0.08	<0.08
Boron (B)	0.5	<0.5	Potassium (K)	5	<5
Cadmium (Cd)	0.03	<0.03	Praseodymium (Pr)	0.01	<0.01
Calcium (Ca)	3	3	Rhenium (Re)	0.06	<0.06
Cerium (Ce)	0.01	<0.01	Rhodium (Rh)	0.02	<0.02
Cesium (Cs)	0.02	<0.02	Rubidium (Rb)	0.01	<0.01
Chromium (Cr)	0.03	<0.03	Ruthenium (Ru)	0.05	<0.05
Cobalt (Co)	0.02	<0.02	Samarium (Sm)	0.04	<0.04
Copper (Cu)	0.05	<0.05	Scandium (Sc)	0.2	<0.2
Dysprosium (Dy)	0.04	<0.04	Selenium (Se)	7	<7
Erbium (Er)	0.02	<0.02	Silicon (Si)	50	<50
Europium (Eu)	0.02	<0.02	Silver (Ag)	0.03	<0.03
Gadolinium (Gd)	0.04	<0.04	Sodium (Na)	0.06	<0.68
Gallium (Ga)	0.04	<0.04	Strontium (Sr)	0.01	<0.01
Germanium (Ge)	0.05	<0.05	Tantalum (Ta)	0.02	<0.02
Gold (Au)	0.05	<0.05	Tellurium (Te)	0.04	<0.04
Hafnium (Hf)	0.03	<0.03	Terbium (Tb)	0.02	<0.02
Holmium (Ho)	0.01	<0.01	Thallium (Tl)	0.05	<0.05
Indium (In)	0.02	<0.02	Thorium (Th)	0.02	<0.02
Iridium (Ir)	0.06	<0.06	Thulium (Tm)	0.01	<0.01
Iron (Fe)	0.1	0.1	Tin (Sn)	0.02	<0.02
Lanthanum (La)	0.01	<0.01	Titanium (Ti)	0.05	<0.05
Lead (Pb)	0.05	<0.05	Tungsten (W)	0.02	<0.02
Lithium (Li)	0.03	<0.03	Uranium (U)	0.02	<0.02
Lutetium (Lu)	0.01	<0.01	Vanadium (V)	0.03	<0.03
Magnesium (Mg)	0.02	0.06	Ytterbium (Yb)	0.03	<0.03
Manganese (Mn)	0.03	<0.03	Yttrium (Y)	0.02	<0.02
Mercury (Hg)	0.05	<0.05	Zinc (Zn)	0.06	<0.06
Molybdenum (Mo)	0.05	<0.05	Zirconium (Zr)	0.05	<0.05