The frictional force $F_c$ is directed toward the center of the circle and its source is $F_N$.

$W = mg = (55.8 \text{ kg})(9.8 \text{ m/s}^2) = 568 \text{ N}$

$F_S = M_S F_N = M_S F_c = M_S (5.5 \times 10^3 \text{ N})$

AND $W = F_S$

$M_S = \frac{M_S}{F_N} = 568 \text{ N} \div 5.5 \times 10^3 \text{ N}$

$M_S = 0.102$