Stokes number, $St$

Sometimes referred to as the inertial parameter; it is an index of the impactability of an aerosol particle. It is defined by the equation: $St = 2 \tau (V_i - v_i) D_p$ where $D_p$ is the diameter of a small drop, $V_i - v_i$ is the difference in fall velocities of the drop and aerosol particles and $\tau$ is the characteristic relaxation time of a particle.

Source:
PAC, 1990, 62, 2167 (Glossary of atmospheric chemistry terms (Recommendations 1990)) on page 2216