API SQ protects against Low-Speed Pre-Ignition!

API SQ is the new gasoline engine oil specification that protects against Low-Speed Pre-Ignition (LSPI) in Turbocharged Gasoline Direct Injection (TGDI) engines.

Low-Speed Pre-Ignition (LSPI) is an abnormal combustion phenomenon observed at low engine speeds in Turbocharged Gasoline Direct Injection (TGDI) engines in which the fuel/air mixture in the combustion chambers ignites before spark timing. LSPI can cause engine knock, broken spark plugs and cracked pistons, and, in severe cases, catastrophic engine failure.