

Oxygen Release Compound, ORC[®]

Uses in Dual Phase Remediation of Chlorinated Hydrocarbons

Chlorinated hydrocarbons, such as PCE and TCE, are among the most recalcitrant environmental contaminants. Degradation mechanisms for these compounds are complex. While there is some evidence of aerobic breakdown, most of the metabolic pathways are anaerobic. Also, there may be dual-phase requirements for complete remediation to dechlorinated endpoints such that the process is initiated under anaerobic conditions and completed in the presence of oxygen. *ORC can be used to complete remediation at the various oxygen-dependent stages.*

ORC Can be Useful as Part of a Dual Phase Chlorinated Remediation

Phase 1

Anaerobic Degradation of PCE and TCE to DCE and VC



Phase 2

Aerobic (Co-metabolic or Substrate) Degradation of DCE and VC to CO₂, HCl and H₂O