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## Treatment of TNT Wastewater by Supercritical Water Oxidation

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**Abstract**: The treatment of TNT wastewater were carried out by supercritical water oxidation (SCWO). The results show that SCWO can efficiently degrade organics in TNT wastewater with $O_2$ oxidant. Reaction temperature, pressure, residence time and oxygen excess are the main influence factors in removing COD (chemical oxygen demand) of TNT wastewater. The COD removal efficiency can be notably improved as reaction temperature increases. With the temperature 550 ℃, the pressure 24 MPa, the residence time 120 s, and oxygen excess 300%, the COD removal rate is over 99.80%.

**Key words**: enviromental science and technology; supercritical water oxidation; TNT; wastewater treatment

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