



DISINFECTING
CLEANING
PURIFYING
pure@dispura.co.za
063 238 5223

DISPURA OZONE WASTER WATER TREATMENT GUIDE

COD removal with Ozone

- Complete oxidation from inert COD to CO₂
- Cracking of COD → inert organic molecules are cracked into smaller molecules which consequently become biodegradable

$$\text{COD}_{\text{TOTAL}} = \text{COD for Total Organic} + \text{COD for Inorganic}$$

High Ozone dosage – COD oxidised to CO₂ – 2g to 5g Ozone/1g COD removed

Low Ozone dosage – COD transformed into BOD – 0.7g – 1.5g Ozone/1g COD removed

Ozone in Waste Water Treatment

Pre-ozonation

Pre-treatment to remove toxic substances like Phenols, Cresols, etc.

Sludge treatment

To improve sludge disintegration and improve sludge reduction

To eliminate filamentous bacteria and reduce SVI (Sludge Volume Index)

Final ozonation

Removal of endocrine disruptors

Elimination of inert COD

Color/odor removal

Disinfection

Removal of other substances like Phenols, etc.

**Please note this is a guide only and is not to be used for definitive purposes without consultation*