



KARUN PETROCHEMICAL COMPANY

ORTHO TOLUENE-DIAMINE (OTD)

Ortho toluene-diamine (OTD) is an organic compound with the formula C₆H₃CH₃(NH₂)₂. It is a light gray solid mainly composed of 2,3- and 3,4-diaminotoluene isomers. OTD is unstable and darkens upon exposure to air due to oxidation, and it releases toxic nitrogen oxides when heated. At KARUN Petrochemical Company, OTD is produced as a byproduct via toluene nitration, followed by Pd-Pt catalyzed reduction and a purification process.

Producer	Applications		
KARUN PETROCHEMICAL	OTD is used as an intermediate for producing tolyltriazole corrosion inhibitors, as a precursor in polyether polyol production, and in the dye, pharmaceutical, hair, and cosmetic industries.		
Typical Properties			
Resin Properties	Unit	Typical Value	Test Method
Appearance	-	Light grey to dark	Visual
Purity	WT%	Min. 98.0	21.70.23A
Other isomers	WT%	Max. 2.0	21.70.23A
Melting point	°C	60.0-70.0	H900-3000