

**PRODUCT SPECIFICATION MARINE
RESIDUAL FUEL(RME-180)**

Dok. No : TPR.ÜPM.PSP.0650
Yayın Tarihi : 19.01.2010
Rev. No : 8
Rev. Tarihi : 02.03.2018
Sayfa No : 1 / 2

PRODUCT NAME : MARINE RESIDUAL FUEL (RME 180) (*)
TÜPRAŞ CODE NO : 650

Property	Test Unit	Guarantee	Limit	Test Method
Density at 15°C	kg/m ³	991	Max	TS 1013 EN ISO 3675 or TS EN ISO 12185
Kinematic Viscosity at 50 °C	cSt	180	Max	TS 1451 EN ISO 3104
Flash Point	°C	60,0	Min	TS EN ISO 2719
Pour Point	°C	30	Max	TS 1233 ISO 3016
Hydrogen Sulfide	mg/kg	2,00	Max	IP 570
Carbon Residue; micro method	% wt	15,00	Max	TS EN ISO 10370
Sulfur	% wt	1,0-3,5		TS 6838 EN ISO 8754 TS 5144 EN ISO 14596
Ash	% wt	0,070	Max	TS EN ISO 6245
Water	% vol	0,50	max	TS 124 EN 1428
Vanadium	mg/kg	150	Max	TS EN ISO 14597 IP501 IP470
Total Sediment aged	% wt	0,10	Max	TS ISO 10307-2
Acid Number	mgKOH/g	2,5	max	ASTM D 664
Aluminium+Silicon	mg/kg	50	Max	TS ISO 10478 IP 501 IP 470

PRODUCT NAME : MARINE RESIDUAL FUEL (RME 180) (*)
TÜPRAŞ CODE NO : 650

Property	Test Unit	Guarantee	Limit	Test Method
Used Lubricating Oils (ULO)	Fuel musn't contain ULO			
(**)Calcium and zinc; or	mg/kg	Calcium>30 and zinc>15; or		IP 501 or IP 470
(**) Calcium and phosphorus	mg/kg	Calcium>30 and phosphorus>15		
CCAI		860	Max	
Sodium	mg/kg	50	Max	IP 501 or IP 470

(*) This product is produced in İzmir Refinery.

(**) A fuel shall be considered to contain ULO when combinations of calcium and zinc or calcium and phosphorus are above the specified levels.