



**TURKMENISTAN**  
**Turkmenbashy oil refineries complex**

**FUEL FOR REACTIVE ENGINES TS-1**  
**TDS 10227-86 change № 3**

№	Description of index	Figure
1	Density 20 <sup>0</sup> C , kg/m <sup>3</sup> ,	775
2	Fraction composition: - Initial boiling point. <sup>0</sup> C . not more than 10% , <sup>0</sup> C,not more than : 50% <sup>0</sup> , <sup>0</sup> C,not more than : 90% <sup>0</sup> ,C,not more than : 98 % <sup>0</sup> ,C,not more than :	150 165 195 230 250
3	Kinematic viscosity 20 <sup>0</sup> C mm <sup>2</sup> /s ( sST) not less than -40 <sup>0</sup> C mm <sup>2</sup> /s ( sST)	1,25 8
4	Lower heat of combustion, not less than k Dž/kg	42900
5	Height of nonsmoke flame, mm	25
6	Acidity, mg KOH by 100sm <sup>3</sup> ,not more than	0,7
7	Iodine number,mg KOH by 100g not more than	3,5
8	Flash point in close cup, <sup>0</sup> C, not less than	28
9	Temperature of crystallizations beginning <sup>0</sup> C	-50
10	Thermo tart stability in steady-state condition under 150 <sup>0</sup> C (sediment concentration) mg by 100sm <sup>3</sup> fuel, not more than	18
11	Mass portion of aromatic hydrocarbons, % , not more than	22
12	Actual resin concentration.mg 100sm <sup>3</sup> fuel, not more than	5
13	Mass portion of total sulfur. %, not more than	0,25
14	Mass portion of mercaptane sulfur, %. not more than	0,005
15	Mass portion of hydrogen sulfide	no
16	Copper plate testing (100 <sup>0</sup> C at 3 hour)	ok
17	Ash contents. %, not more than	0,003
18	Presence of acids and bases.soluble in water	no
19	Contents soap of the naften acids	no
20	Presence of mechanical Impurities and water	no
21	Lnteraction with water, ball, not more than condition to surfaces of the section condition of the separate phases	1 1

**Note:** for fuel TC-1, used for all climatic zones, with the exclusion of zones 1, is allowed temperature of crystallizations beginning not above-50°C