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|--|-----------------------------|---------------------------------------|-----------------|
|  | OPET SPESİFİKASYONLARI      |                                       |                 |
|  | UNLEADED GASOLINE 95 OCTANE |                                       |                 |
| DOKÜMAN KODU<br>OPET.SPEC.022  | REVİZYON NO<br>16           | YAYIN / REVİZYON TARİHİ<br>09.09.2019 | SAYFA NO<br>1/2 |

PRODUCT CODE: OPET – 220


Publish Date: January 2006

**UNLEADED GASOLINE 95 OCTANE  
PRODUCT SPECIFICATION**

| PROPERTY  | UNITS             | GUARANTEE  | LIMITS | TEST METHOD                                    |
|---|-------------------|--|--------|--|
| Appearance  |                   | Clear and Bright   |        | Visual   |
| Corrosion<br>(3 hours at 50 °C)   | Degree            | No. 1  | Max.   | EN ISO 2160                                    |
| Density at 15 °C  | kg/m <sup>3</sup> | 720-775  |        | EN ISO 3675<br>TS EN ISO 12185                 |
| Distillation  |                   |  |        | EN ISO 3405                                    |
| Evaporated at 70°C  | % (V/V)           |  |        |  |
| Summer Grade (a)  |                   | 20-48  |        |  |
| Winter Grade (b)  |                   | 22-50  |        |  |
| Evaporated at 100°C   | % (V/V)           | 46-71  |        |  |
| Evaporated at 150°C   | % (V/V)           | 75   | Min.   |  |
| End Point   | °C                | 210  | Max.   |  |
| Residue   | % (V/V)           | 2  | Max.   |  |
| Gum, existent (Washed)  | mg/100 mL         | 5  | Max.   | EN ISO 6246                                    |
| Oxidation Stability   | Minutes           | 360  | Min.   | EN ISO 7536                                    |
| Research Octane Number, RON (c)   |                   | 95,0   | Min.   | EN ISO 5164                                    |
| Motor Octane Number, MON (c)  |                   | 85,0   | Min.   | EN ISO 5163                                    |
| Lead Content  | mg/L              | 5  | Max.   | TS EN 237                                      |
| Sulphur Content   | mg/kg             | 10   | Max.   | EN ISO 13032<br>EN ISO 20846<br>EN ISO 20884   |
| Manganese Content   | mg/L              | 2,0  | Max.   | EN 16135<br>EN 16136                           |
| Vapor Pressure (VP)   | kPa               |  |        | TS EN 13016-1(d)                               |
| Summer Grade (a) *  |                   | 45-60  |        |  |
| Winter Grade (b)  |                   | 60-90  |        |  |
| Vapor Lock Index (VLI)**  |                   |  |        |  |
| Transition Period for Summer and Winter Grade   | Index             | 1150   | Max.   |  |
| Benzene content   | % (V/V)           | 1,0  | Max.   | EN 238<br>EN 12177<br>EN ISO 22854             |
| Olefins Aromatics   | % (V/V)           | 18,0<br>35,0   | Max.   | EN ISO 22854<br>EN 15553                       |
| Oxygen Content  | % (m/m)           | 2,7  | Max.   | TS 11413 EN 1601<br>TS EN 13132<br>TS EN 22854 |
| İsopropyl alcohol<br>Isobutyl alcohol<br>Tert-butyl alcohol<br>Ethers<br>Other Oxygenates | % (V/V)           | Blending amount of oxygen content is limited to be %2,7 (m/m) maximum. |        | EN 1601<br>EN 13132<br>EN ISO 22854            |
| Methanol  | % (V/V)           | 3,0  | Max.   | EN 1601<br>EN 13132<br>EN ISO 22854            |
| Ethanol   | % (V/V)           | 5,0  | Max.   | EN 1601<br>EN 13132<br>EN ISO 22854            |

|   |                                       |  |
|---|---------------------------------------|--|
| ŞİRKETE ÖZEL<br>REVİZE EDEN<br>ÜRÜN KALİTE UZMANI | KONTROL EDEN<br>KURUMSAL SEÇ-K MÜDÜRÜ | ONAYLAYAN<br>ÜRÜN KALİTE VE LABORATUVA |
|---|---------------------------------------|--|

Doküman QDMS' de olduğu sürece kontrollü dokümandır. Yazdırıldığında kontrollü doküman olmaktan çıkar.

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\* Only valid for ethanol added Unleaded Gasoline, Summer Period RVP limit value is increased according to the ethanol content with respect to below table.

| Ethanol Content of Gasoline (% V/V) | Incremental value for vapor pressure, kPa |
|-------------------------------------|---|
| 0                                   | 0   |
| 1                                   | 3,7                                       |
| 2                                   | 6,0                                       |
| 3                                   | 7,2                                       |
| 4                                   | 7,8                                       |
| 5                                   | 8,0                                       |
| 6                                   | 8,0                                       |
| 7                                   | 7,9                                       |
| 8                                   | 7,9                                       |
| 9                                   | 7,8                                       |
| 10                                  | 7,8                                       |

**Not:** The permitted vapour pressure waiver for intermediate ethanol content between the values listed in table shall be determined by a straight line interpolation between the ethanol content immediately above and that immediately below the intermediate value determined by the methods indicated in table.

\*\*  $VLI = 10 \times VP + 7 \times (E70)$

- (a) April 1<sup>st</sup> – October 31<sup>st</sup> ( $\pm$  4 weeks).
- (b) Out of summer period.
- (c) To report the test result, correction factor of 0,2 is reduced from the actual result, as noted in TS EN 228.
- (d) Dry Vapor Pressure Equivalent (DVPE) should be reported.

|   |                                       |  |
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