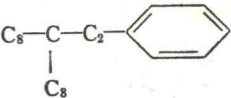
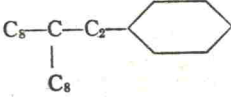
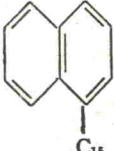
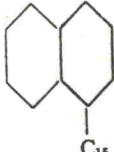
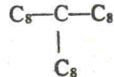
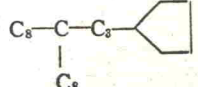
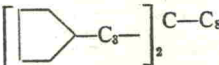
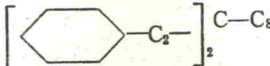
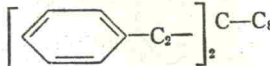
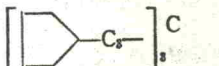


TABLE I. Atmospheric pressure physical properties of the hydrocarbons.

| PSU ^a No. | Name | Structure ^b | Molecular weight | Melting point | Boiling point at 1 mm (°C) | Refraction index at 40°C | Viscosity at 98.9°C (cp) |
|-------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|---------------|----------------------------------|--------------------------------|--------------------------------|
| 528 | <i>n</i> -Dodecane | <i>n</i> -C ₁₂ | 170.3 | -5.5 | 104.0 (20 mm) | 1.4134 | 0.5172 |
| 532 | <i>n</i> -Pentadecane | <i>n</i> -C ₁₅ | 212.4 | 9.9 | 91.5 | 1.4238 | 0.7984 |
| 537 | <i>n</i> -Octadecane | <i>n</i> -C ₁₈ | 254.5 | 27.8 | 128.0 | 1.4314 | 1.154 |
| 87 | 9(2-Phenylethyl)heptadecane |  | 344.6 | -26.7 | 175.5 | 1.4729 | 2.03 |
| 88 | 9(2-Cyclohexylethyl)heptadecane |  | 350.6 | Glasses | 188.5 | 1.4539 | 2.57 |
| 174 | 1- α -Naphthylpentadecane |  | 338.7 | 41.6 | 215.0 | 1.5215 ^c | 2.891 |
| 175 | 1- α -Decalylpentadecane |  | 348.6 | Up to 30.9 | 204.5 | 1.4694 | 3.547 |
| 25 | 9- <i>n</i> -Octylheptadecane |  | 352.7 | -13.8 | 184.0 | 1.4412 | 1.87 |
| 110 | 9(3-Cyclopentylpropyl)heptadecane |  | 350.7 | -20.6 | 188.0 | 1.4515 | 2.26 |
| 111 | 1-Cyclopentyl-4(3-cyclopentylpropyl)dodecane |  | 348.6 | Approx. -40 | 193.0 | 1.4630 | 2.88 |
| 19 | 1-Cyclohexyl-3(2-cyclohexylethyl)hendecane |  | 348.6 | Glasses -40 | 194.5 | 1.4683 | 4.06 |
| 18 | 1-Phenyl-3(2-phenylethyl)hendecane |  | 336.5 | Liquid at -60 | 197.0 | 1.5116 | 2.50 |
| 113 | 1,7-Dicyclopentyl-4(3-cyclopentylpropyl)heptane |  | 346.6 | -23.7 | 198.0 | 1.4754 | 3.88 |

^a Assigned for identification purposes only.

^b C_n refers to an unbranched, saturated chain of *n* carbon atoms with the substituent hydrogens.

^c Measured on supercooled sample.