**Supplementary Material:**

***Cupressus arizonica* fruit essential oil: A novel green inhibitor for acid corrosion of carbon steel**

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**Figure S1.** Tafel polarization curves of carbon steel without and with the various concentrations of CAFEO in 1.0 mol/L HCl shifted to E=0.

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Figure S1. PDP curves of carbon steel exposed to 1.0 M HCl in (a) absence and (b) presence of 0.5 g/L of CAFEO at different temperatures.

Table S1. Electrochemical parameters derived from PDP curves without and with 0.5 g/L concentration of CAFEO as a function of temperature.

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| --- | --- | --- | --- | --- |
| Inhibitor | Temperature(K) | -*E*corr(mV/SCE) | *i*corr(µA/cm²) | % IE |
|  | 298 | 474.83 | 996 | ---- |
| Blank | 303 | 454.42 | 1181 | ---- |
|  | 313 | 442.97 | 1 844 | ---- |
|  | 323 | 450.95 | 2 408 | ---- |
|  | 298 | 527.17 | 76 | 92 |
| CAFEO | 303 | 514.31 | 171 | 85 |
|  | 313 | 543.38 | 444 | 76 |
|  | 323 | 509.60 | 1 447 | 40 |