Abstract The corrosion inhibition of aluminium in HCl solution in the presence of exudate gum from Raphia hookeri at temperature range of 30–608C was studied using weight loss and thermometric techniques.It has been shown that natural products of plant origin contain different organic compounds (e.g. alkaloids, tannins, pigments, organic and amino acids, and most are known to have inhibitive action [8–15].The inhibition efficiency increases with increase in inhibitor concentration butdecreaseswithanincreaseintemperature.TheinhibitiveeffectoftheRaphiahookeriexudatecouldbeattributed to thepresenceofsomephytochemicalconstituentsintheexudatewhichisadsorbedonthesurfaceofthealuminium metal.The exudate gumwasfoundtoobeyTemkinadsorptionisothermandKinetic–ThermodynamicModelofElAwadyetal.atalltheconcentrationsandtemperaturesstudied.Phenomenonofphysicaladsorptionisproposedfrom the activation parameters obtained.Keywords: Aluminium; Raphia hookeri; Inhibition; Corrosion; Hydrochloric acid; Exudate gum 1.Thermodynamic parameters reveal that the adsorption process is spontaneous.