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(54) Title: HIGH TEMPERATURE NAPHTHENIC ACID CORROSION INHIBITION USING ORGANOPHOSPHOROUS SULPHUR COMPOUNDS AND COMBINATIONS THEREOF

(57) Abstract: The present invention relates to the field of processing hydrocarbons which causes corrosion in the metal surfaces of processing units. The invention addresses the technical problem of high temperature naphthenic acid corrosion and sulphur corrosion and provides a solution to inhibit these types of corrosion. The composition formed by reacting high reactive polyisobutylene (HRPIB) with phosphorous pentasulphide in presence of catalytic amount of sulphur provides high corrosion inhibition efficiency in case of high temperature naphthenic acid corrosion inhibition and sulphur corrosion inhibition. The invention is useful in all hydrocarbon processing units, such as, refineries, distillation columns and other petrochemical industries.



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