Title (en)

CORROSION INHIBITING COMPOSITIONS FOR HEAT TRANSFER FLUIDS

Title (de)

KORROSIONSINHIBIERENDE ZUSAMMENSETZUNGEN FÜR WÄRMEÜBERTRAGUNGSFLÜSSIGKEITEN

Title (fr)

COMPOSITIONS INHIBITRICES DE LA CORROSION POUR FLUIDES DE TRANSFERT DE CHALEUR

Publication

**EP 1192296 A1 20020403 (FR)**

Application

**EP 00949557 A 20000623**

Priority

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- FR 9908214 A 19990628

Abstract (en)

[origin: FR2795432A1] The composition comprises a four component mixture including an unsaturated monocarboxylic acid, a saturated mono- or dicarboxylic acid, a 1,3,5-triazine tricarboxylic acid and an azole compound. A process for the inhibition of multimetal corrosion by heat transfer fluids, whether or not they contain an organic freezing point depressant, comprises the addition to the fluid of 3 - 6 wt.% (preferably 3.8 - 5) of an organic inhibitor system consisting of (wt.%): (I) a monocarboxylic 10 - 18C unsaturated acid or an alkali metal salt, amine, or group of monoethylamine, diethylamine, triethylamine or alkanolamine of the group monoethanolamine, diethanolamine, triethanolamine or methyldiethanolamine (5 - 15); (II) a saturated carboxylic acid comprising a 5 - 16C monocarboxylic acid or a 4 - 12C dicarboxylic acid, or alkali, amine or alkanolamine derivatives (40 - 70); (III) a tricarboxylic derivative of 1,3,5-triazine (20 - 40) of formula (I); (IV) an azole derivative (1 - 5) selected from: (a) imidazoles of formula (II); (b) benzimidazoles of formula (III); (c) triazoles of formula (IV); (d) benzotriazoles of formula (V); (e) tetrahydrobenzotriazoles or thiazoles of formula (VI); (f) benzothiazoles of formula (VII); and (g) alkali metal salts of these azoles. R = 2 - 6C carboxyalkyl or an alkali metal salt, amine or alkanolamine of this derivative; R1 = H or Me; R2 = H or mercapto; R3 = H or a radical of formula -CH2-N(R4)R5; R4, R5 = 2-ethylhexyl or hydroxyalkyl, particularly an ethanol residue. An Independent claim is also included for the inhibitive composition and an inhibitive anti-freeze composition including the composition of the invention.

IPC 1-7

**C23F 11/10**; C09K 5/20

IPC 8 full level

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CPC (source: EP KR)

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