

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
16 September 2021 (16.09.2021)



(10) International Publication Number
WO 2021/180834 A1

(51) International Patent Classification:

C08K 5/00 (2006.01) C08K 5/526 (2006.01)

C08K 5/3435 (2006.01)

(21) International Application Number:

PCT/EP2021/056155

(22) International Filing Date:

11 March 2021 (11.03.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003550.7 11 March 2020 (11.03.2020) GB

(71) Applicant: **SI GROUP SWITZERLAND (CHAA) GMBH** [CH/CH]; Kästeliweg 7, 4133 Pratteln (CH).

(72) Inventors: **HILL, Jonathan**; 45 Overdale Crescent Flixton, Manchester M41 5GR (GB). **BYRNE, Jonathan**; 11 Mansfield Road Urnston, Manchester M41 6HF (GB).

(74) Agent: **BRAND MURRAY FULLER LLP**; 50 Eastcastle Street, London W1W 8EA (GB).

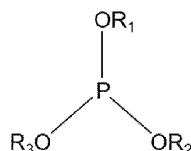
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

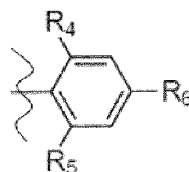
Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: HYDROLYTICALLY STABLE PHOSPHITE COMPOSITION, POLYMER COMPOSITION COMPRISING SAID HYDROLYTICALLY STABLE PHOSPHITE COMPOSITION



(I)



(II)

(57) Abstract: The invention provides a hydrolytically stabilised phosphite composition, comprising: a. a phosphite antioxidant which is a liquid at ambient conditions and comprises a blend of at least two different phosphites of Formula I: wherein R₁, R₂ and R₃ are independently selected alkylated aryl groups of Formula II: wherein R₄, R₅ and R₆ are independently selected from the group consisting of hydrogen and C₁ to C₆ alkyl, provided that at least one of R₄, R₅ and R₆ in each phosphite is selected from the group consisting of tert-butyl and/or tert-pentyl; and b. a nitrogen-containing compound comprising a nitrogen atom, wherein the nitrogen atom: i. has a pKaH value of from about 7 to about 11; and ii. is sp³ hybridised, and wherein the nitrogen-containing compound is absent any labile protons.

WO 2021/180834 A1