

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2025/113955 A1

(43) International Publication Date
05 June 2025 (05.06.2025)

(51) International Patent Classification:

C08G 59/66 (2006.01) C09J 163/00 (2006.01)
C08G 59/68 (2006.01) C08G 75/12 (2016.01)
C08G 18/38 (2006.01)

(21) International Application Number:

PCT/EP2024/081630

(22) International Filing Date:

08 November 2024 (08.11.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

23212364.6 27 November 2023 (27.11.2023) EP

(71) Applicant: HUNTSMAN ADVANCED MATERIALS
(SWITZERLAND) GMBH [CH/CH]; Klybeckstrasse
200, 4057 Basel (CH).

(72) Inventors: LAKKAICHI, Adem; Klybeckstrasse 200,
4057 Basel (CH). STORZ, Christof; Klybeckstrasse 200,
4057 Basel (CH). CHERKAOUI, Zoubair; Klybeck-
strasse 200, 4057 Basel (CH).

(74) Agent: ROBERTS, Philippa; Grijpenlaan 18, 3300 Tienen
(BE).

(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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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))

(54) Title: HEAT DE- AND REBONDABLE, IN-SITU POLYMERIZED RESIN COMPOSITION

(57) Abstract: The present invention relates to a de- and rebondable polymer prepared from the reaction between a difunctional mer-
captan hardener, and a difunctional thiol-reactive resin. The resultant polymer has a softening point greater than about 70 °C, preferably
about 90 °C to about 150 °C.

WO 2025/113955 A1