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Analysis of the Linear Methods for Determining Copolymerization Reactivity Ratios, VII

A Critical Reexamination of Radical Copolymerizations of Styrene

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SUMMARY:

The reactivity ratios of 8000 published styrene copolymerization systems have been reviewed in terms of the extended Kelen-Tüdős method. Only 649 systems were described in sufficient detail for reevaluation and classification. r-Values, together with their 95% confidence limits have been calculated. Quantities $\delta^{\square}$ and Q, suitable for classification of the systems, have been applied. Of the 649 reevaluated systems, 243 (37.5%) were found to belong to class I and 221 (34.1%) to class I(!), i.e. 464 (71.6%) systems for which the conventional copolymerization equation was found to be adequate. 66 (10.2%) class II systems were found where the two-parameter model does not hold. Finally, 118 (18.2%) systems were judged to belong to class III, i.e. systems for which the experimental data are inconsistent and the published r-values meaningless.

ZUSAMMENFASSUNG:

Anhand der erweiterten Kelen-Tüdős-Methode wurden Copolymerisationsparameter für Copolymerisationen mit Styrol aus etwa 8000 Publikationen geprüft. Für die Neuberechnung und Klassifizierung sind in der Literatur lediglich 649 Monomersysteme ausreichend genau beschrieben. Es wurden r-Werte einschließlich des 95% Vertrauensintervalls berechnet. Zur Klassifizierung des jeweiligen Systems wurden die Größen $\delta^{\square}$ und Q angewendet. Unter 649 neu ausgewerteten Systemen wurden 243 (37,5%) der Klasse I und 221 (34,1%) der Klasse I(!) zugeordnet. Insgesamt ist für 464 (71,6%) Monomerpaare die konventionelle Copolymerisationsgleichung zutreffend. Für 66 (10,2%) Systeme, die der Klasse II zugeordnet wurden, ist das Zwei-Parameter-Modell ungültig. Zur Klasse III gehören 118 (18,2%) Monomersysteme,

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für die die experimentellen Daten inkonsistent und die publizierten r-Werte unzutreffend sind.

Introduction

Earlier publications[1-4] were concerned with a reexamination of published copolymerization systems in terms of the KT equation. The Kelen-Tüdős (KT) equation[5,6] has been derived from the classical copolymerization equation[7,8] and is generally applicable to simple (two monomers/two propagating species) binary systems. The KT method was extended to systems with high conversion[9,10].

The KT transformation gives the best estimates of copolymerization parameters obtainable by linear least-squares calculations and it provides a valuable visual display of experimental points. As described in our previous reclassification research[1-4], we classified the recalculated systems as follows: class I — strictly linear systems describable by the two-paramter model and giving accurate parameters; class I(!) — systems consistent with the two parameter model but giving poorer parameter estimates because of a greater dispersion of experimental points; class II — nonlinear systems where the two-parameter model does not hold; and class III — systems with inconsistent data.

This article concerns a reexamination of radical copolymerization systems of styrene. Reactivity ratios have been recalculated and are given with their 95% confidence limits. The above-mentioned classification was quantisized by introducing the quantities $\delta^{\square}$ and Q.

Calculation Method

Detailed description of calculation was given in[3], together with the calculation steps for the copolymerisation parameters r_1 and r_2. The confidence intervals of the copolymerization parameters are determined by the standard method of linear regression calculations. The 95% confidence intervals of the parameters are

$$\Delta r_1 = \pm t_{0.95}(n-2)\left(\frac{S^2_{min}}{n-2}\,\frac{\Sigma(1-\xi_i)^2}{D}\right)^{1/2} \tag{1}$$

$$\Delta r_2 = \pm \alpha\, t_{0.95}(n-2)\left(\frac{S^2_{min}}{n-2}\,\frac{\Sigma\xi_i^2}{D}\right)^{1/2} \tag{2}$$

where S^2_{min} is the minimum value of the residual sum of squares corresponding to the least-squares estimates of parameter r_1 and r_2:

$$S^2_{min} = \Sigma \left[\eta_i - \left(r_1 + \frac{r_2}{\alpha} \right) \xi_i + \frac{r_2}{\alpha} \right]^2 \tag{3}$$

D stands for the expression

$$D = \Sigma \xi_i^2 \, \Sigma (1 - \xi_i)^2 - [\Sigma \xi_i (1 - \xi_i)]^2 \tag{4}$$

and $t_{0.95}(n - 2)$ is the tabulated value of the Student *t* distribution for *n* data at the 95% level.

For systems consistent with the simple binary copolymerization model (i.e., giving linear $\xi - \eta$ plots), we introduced a quantitative measure of the confidence $\delta^{\square}$, defined by the relative values of confidence intervals:

$$\delta^{\square} = \Delta r_1 \, \Delta r_2 / r_1 \, r_2 \tag{5}$$

The recalculation of copolymerization parameter determinations allows us to evaluate quantitatively the design of published experiments. It has been shown[12], that in ideally planned experiments the auxiliary parameter α is equal to the ratio of the copolymerization parameters, r_2/r_1. Thus, an experimental design can be characterized by the parameter Q, which in the ideal case has the maximum value of 1:

$$Q = \exp \left[- \left| \ln \left(\alpha \frac{r_1}{r_2} \right) \right| \right] \tag{6}$$

Low Q values, obtained when the experimental α is significantly different from the ideal, indicate improperly designed experiments.

Results and Discussion

Of the about 8000 styrene containing radical copolymerization systems described in the literature, we were able to reevaluate only 649. Unfortunately, many authors gave only composition diagrams or they have chosen not to report detailed experimental data at all. This is a highly objectionable practice and journals should not accept manuscripts for publication without these data.

Regrettably the reproducibility and the accuracy of the published copolymerization data do not reach the required level for reevaluation in many cases.

The data of the reexamined 649 systems are summarized in Tab. 1. A few extremely high-conversion data have been found and those unsuitable for the exact evaluation according to the developed criteria[9,10] were excluded (see Tab. 1, Remarks b, d).

Tab. 1 also contains confidence intervals, which serve to quantisize our classification system in an objective manner. The product of the relative errors of parameters (i.e., the area of relative error square, $\delta^{\square}$) is particularly suitable for this purpose.

Column 9 of Tab. 1 shows $\delta^{\square}$ values calculated by Eq. (5). The classification in column 10 was made independently from these calculations by visual evaluation of the $\xi - \eta$ plot, as described in ref. 1. Comparison of the data in columns 9 and 10 indicates that the borderline beween classes I and I(!) is at $\delta^{\square} \simeq 0.1$, and that of classes I(!) and III at $\delta^{\square} \simeq 10$. These borderlines are not very sharp and the $\xi - \eta$ plot must also be considered to judge the classifications of intermediate systems.

The classification method based on the numerical value of $\delta^{\square}$ is not applicable for class II systems. The separation and classification of such systems can only be done on the basis of the $\xi - \eta$ plot.

The 11th column of Tab. 1 shows Q, which is an indication of the quality of experimental design[12]. The few Q values obtained do not allow us to reach general conclusions; it appears, however, that in general class I determinations are associated with high values of Q.

For systems in which one of the r-values equals zero, the quantities $\delta^{\square}$ and Q cannot be calculated [see[5] and[6]]. In such systems small negative values were often obtained for r_1 or r_2. A negative r-value is physically meaningless, therefore, if the $r = 0$ was inside the 95% confidence interval, we repeated the calculation by *a priori* assuming $r = 0$. The values obtained by this procedure are given in a second line with the remark "p" or "q". Usually, this leads to an only small change in the value of the non-zero reactivity ratio, therefore, the confidence intervals given in the first line can also be used for the second line.

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List of Abbreviations in Table 1

ACVA = 4,4'-azo-bis(4-cyanovaleric acid)
AIBN = azo-bis-isobutyronitrile
BPO = benzoyl peroxide
DMF = dimethyl formamide
DMSO = dimethyl sulfoxide
MEE = 2-(2-methoxyethoxy)-ethanol
MEK = methyl ethyl ketone
TBB = tributylborane
THF = tetrahydrofurane

M_1 = 1st monomer (styrene)
M_2 = 2nd monomer
? = unspecified
— = none

Tab. 1. Summary of free radical copolymerization systems with styrene as first monomer.

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
1	acetoxymethyl vinyl ketone	AIBN/MEK/50°C	0.10	0.36	1	0.103 ± 0.011	0.368 ± 0.018	5.402	I	0.456	
2	N-(1-acetoxyphenyl)citraconimide	AIBN/THF/60°C	0.17 ± 0.04	0.047 ± 0.05	2				III		
3	N-(1-acetoxyphenyl)itaconimide	AIBN/THF/60°C	0.25 ± 0.08	0.15 ± 0.07	3				III		
4	N-(p-acetoxyphenyl)maleimide	AIBN/cyclohexanone/60°C	0.1 ± 0.05	0.01 ± 0.01	4				II		e
5	p-acetoxystyrene	AIBN/-/60°C	0.85 ± 0.15	1.35 ± 0.2							f
			0.840 ± 0.003	0.924 ± 0.068							e
			1.293 ± 0.020	1.377 ± 0.028	5	0.835 ± 0.029	1.305 ± 0.050	0.001	I	0.846	e
6	p-acetoxystyrene	AIBN/-/60°C	0.88	1.18	6	0.887 ± 0.034	1.218 ± 0.069	0.002	I	0.661	
7	N-(1-acetylphenyl)iso-maleimide	AIBN/THF/70°C	0.10	0.11	7	0.0507 ± 0.0977	0.0370 ± 0.0929	4.84	I(I)	0.812	
8	N-(p-acethylphenyl)maleimide	AIBN/cyclohexanone/60°C	0.04 ± 0.02	0.0 ± 0.01	4				III		e,n
9	acrolein	AIBN/dioxane/50°C	0.22	0.33	8	0.196 ± 0.006	0.313 ± 0.007	0.0006	I	0.726	e
10	acrolein	AIBN/dioxane/60°C	0.25	0.25	9	0.235 ± 0.069	0.213 ± 0.061	0.084	I	0.959	
11	acrolein	?/emulsion/50°C	0.32	0.034	10	0.239 ± 0.079	0.0150 ± 0.0132	0.291	I(I)	0.009	n
12	acrylamide	AIBN/ethanol/60°C	1.44 ± 0.22	0.30 ± 0.09	11	1.64 ± 0.81	0.801 ± 0.647	0.399	I(I)	0.588	
13	acrylamide	AIBN/acetonitrile/60°C	2.79 ± 0.12	1.39 ± 0.07	11	3.49 ± 2.37	2.02 ± 1.53	0.514	I(I)	0.791	
14	acrylamide	BPO/MEE/90°C	1.66	0.27	12	1.69 ± 0.30	0.309 ± 0.101	0.058	I	0.559	s
15	acrylamide	H_2O_2/t-butanol-water/90°C			12	4.71 ± 3.61	0.932 ± 1.014	0.834	I(I)	0.761	
16	acrylamide	BPO/diglyme/90°C	1.40	1.09	12	1.19 ± 0.58	0.780 ± 0.297	0.186	I(I)	0.656	n
17	acrylamide	BPO/DMSO/90°C	2.01	0.16	12	2.27 ± 0.42	0.195 ± 0.094	0.089	I	0.397	
18	acrylamide	BPO/benzonitrile/90°C	1.35	2.4	12	0.735 ± 3.456	1.281 ± 3.043	11.17	I(I)	0.475	t
19	acrylamide	BPO/benzene-benzonitrile/90°C	1.5	4.4	12	0.257 ± 0.822	1.123 ± 0.826	2.355	I(I)	0.196	n
20	acrylamide	BPO/benzene/90°C	0.25	12.5	12				III		n
21	acrylamide	BPO/o-dichlorobenzene/90°C			12				III		t

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
22	acrylamide	AIBN/benzene/90°C	0.67 ± 0.08	0.14 ± 0.27	13	0.605 ± 0.204	0.19 ± 1.11	0.041	I	0.292	
23	acrylamido-1-deoxy-D-glucitol	BPO/H_2O + methanol/50°C	0.056	2.72	14	0.058 ± 0.019	2.716 ± 0.153	0.019	I	0.138	
24	acrylic acid	AIBN/-/60°C	0.19	-	15				III		
25	acrylic acid	AIBN/-/50°C	0.25	0.07	16	0.250 ± 0.030	0.058 ± 0.022	0.045	I	0.341	
26	acrylic acid	AIBN/dioxan/50°C	0.75	0.13	16	0.720 ± 0.057	0.106 ± 0.031	0.023	I	0.293	
27	acrylic acid	AIBN/THF/50°C	0.90	0.14	16	0.897 ± 0.067	0.134 ± 0.035	0.019	I	0.308	
28	acrylic acid	AIBN/methylethylketone/50°C	0.70	0.15	16	0.673 ± 0.036	0.137 ± 0.021	0.008	I	0.373	
29	acrylic acid	AIBN/DMF/50°C	1.03	0.15	16	1.090 ± 0.092	0.137 ± 0.027	0.016	I	0.515	
30	acrylic acid	AIBN/DMF/60°C	1.6	0.05	17	1.621 ± 0.095	0.0255 ± 0.0299	0.069	I	0.056	
31	acrylic acid	AIBN/benzene/60°C	0.30	0.13	17	0.263 ± 0.040	0.0964 ± 0.0334	0.053	I(I)	0.441	n
32	acrylonitrile	BPO/bulk/75°C	0.41 ± 0.08	0.03 ± 0.03	18	(0.363 ± 0.075 0.364	-0.002 ± 0.132) 0		I(I)		f p
33	acrylonitrile	?/bulk/50°C	0.37 ± 0.03	0.07 ± 0.006	19	0.336 ± 0.047	0.0406 ± 0.0099	0.034	I(I)	0.443	f
34	acrylonitrile	t-butylperoxypivalate/suspension /70°C	0.40	0.058	295	0.306 ± 0.136	0.0050 ± 0.1205	10.77	I(I)	0.016	e
35	acrylonitrile	?/-/50°C	0.358	0.065	21	0.335 ± 0.047	0.0405 ± 0.0099	0.034	I(I)	0.443	
36	acrylonitrile	-/emulsion, sodium oleate/80°C	0.78 ± 0.04	0.02 ± 0.02	22	(0.767 ± 0.149 0.798	-0.039 ± 0.0536) 0		I(I)		p
37	acrylonitrile	-/emulsion /80°C	0.98 ± 0.08	-0.05 ± 0.03	22	(0.882 ± 0.166 0.935	-0.052 ± 0.069) 0		I(I)		p
38	acrylonitrile	-/emulsion, sodium oleate/40°C	0.90 ± 0.10	-0.02 ± 0.02	22	(0.895 ± 0.162 0.952	-0.034 ± 0.033) 0		I(I)		n p
39	acrylonitrile	AIBN/DMF/$[M_1]+[M_2]$= 0.6 mol/l/60°C	0.41	0.20	23	0.181 ± 0.029	0.340 ± 0.067	0.031	I(I)	0.854	
40	acrylonitrile	AIBN/DMF/$[M_1]+[M_2]$= 2 mol/l/60°C	0.30	0.16	23	0.137 ± 0.034	0.312 ± 0.035	0.028	I	0.371	
41	acrylonitrile	AIBN/toluene/60°C	0.25	0.13	23				III		
42	acrylonitrile	AIBN/DMF/60°C	0.36	0.13	24				III		
43	acrylonitrile	AIBN/toluene/60°C	0.40	0.13	24				III		
44	acrylonitrile	$K_2S_2O_8$/emulsion/50°C	0.44 ± 0.04	0.1 ± 0.02	25	0.444 ± 0.049	0.102 ± 0.031	0.033	I	0.388	y

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
45	acrylonitrile	lauroyl peroxide/bulk/70°C	0.41	0.04	26	0.413 ± 0.086	0.070 ± 0.020	0.059	I	0.657	
46	N-acryloyl aziridine	AIBN/dioxane/70°C	0.56	0.25	27	0.488 ± 0.424	0.213 ± 0.086	0.352	I(!)	0.535	e
47	N-acryloyl-dibenzazepine	AIBN/benzene/70°C	0.87	1.1	296	0.796 ± 0.076	0.672 ± 0.628	0.089	I	0.102	
48	N-acryloyl-2-oxazolidone	AIBN/benzene/80°C	1.35	0.24	28	1.216 ± 0.151	0.228 ± 0.328	0.179	I	0.104	
49	2-acryloyloxyethyl-N-methyl carbamate	AIBN/MEK/70°C	0.56	0.18	29	0.568 ± 0.033	0.140 ± 0.039	0.016	I	0.187	
50	N-acryloyl pyrrolidone	AIBN/benzene/60°C	0.35	1.50	30	0.265 ± 0.201	1.408 ± 0.793	0.426	I(!)	0.593	
51	allyl chloride	BPO/-/60°C	30	-	31				III		
52	allyl methyl silane	AIBN/-/60°C	36	0	297				III		
53	N-allyloxycarbonyl aziridine	AIBN/dioxane/70°C	50	0	27				II		e
54	3-allyloxymethyl-3-chloromethyl oxacyclobutane	BPO/benzene/65°C	53	0.013	32	128.6 ± 65.8	0.065 ± 0.517	4.088	I(!)	0.054	d
55	allyl phenyl silane	AIBN/-/60°C	20	0	297	(27.14 ± 18.62 28.33	-0.052 ± 0.693) 0		I(!)		p
56	N-allyl-stearamide	BPO/-/90°C	19.7	0.05	33	17.71 ± 1.73	0.001 ± 0.091	6.349	I	0.001	
57	1-(9-antryl)ethyl methacrylate	AIBN/benzene/60°C	0.37 ± 0.08	0.42 ± 0.07	34	0.195 ± 0.080	0.269 ± 0.050	0.076	I(!)	0.298	
58	4-arylazo-3-maleimido-N, N-dimethylaniline	AIBN/-/70°C	-	-	35				III		
59	2-(1-aziridinyl)ethyl methacrylate	BPO/benzene/60°C	0.53 ± 0.02	0.63 ± 0.04	36	0.504 ± 0.023	0.616 ± 0.031	0.002	I	0.876	
60	benzalacetone	AIBN/ethyl ether/60°C	2.02 ± 0.05	0.20 ± 0.05	37	2.187 ± 0.121	0.0779 ± 0.3511	0.248	I	0.011	s
61	benzalacetone	AIBN/ethyl ether/60°C; $SnCl_4$ 0.3 mol/l	1.51 ± 0.05	0.17 ±0.05	37	1.332 ± 0.023	0.183 ± 0.109	0.010	I	0.026	s
62	benzalacetone	AIBN/ethyl ether/60°C; $SnCl_4$ 0.6 mol/l	1.31 ± 0.05	0.14 ± 0.05	37	1.126 ±0.050	0.141 ± 0.267	0.084	I	0.020	s
63	benzalacetophenone	AIBN/ethyl ether/60°C	2.16 ± 0.05	0.19 ± 0.05	37	2.062 ± 0.114	0.407 ± 0.741	0.101	I	0.027	s
64	benzalacetophenone	AIBN/ethyl ether/60°C; $SnCl_4$ 0.3 mol/l	1.32 ± 0.05	0.16 ± 0.05	37	1.515 ± 0.056	0.240 ± 0.480	0.073	I	0.016	s
65	benzalacetophenone	AIBN/ethyl ether/60°C; $SnCl_4$ 0.6 mol/l	1.12 ± 0.05	0.13 ± 0.05	37	1.313 ± 0.034	0.121 ± 0.336	0.073	I	0.008	s
66	benzyl acrylate	AIBN/-/60°C	0.55	0.20	20	0.490 ± 0.114	0.190 ± 0.133	0.163	I	0.339	
67	benzyl acrylate	?/-/60°C	0.52	0.23	38	0.418 ± 0.042	0.343 ± 0.128	0.037	I	0.413	
68	benzyl acrylate	AIBN/-/60°C	0.5	0.25	39	0.522 ± 0.079	0.237 ± 0.055	0.035	I	0.649	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
69	benzylbenzylidene cyanoacetate	BPO/-/70°C	0.43	0	40				II		f
70	N-benzyl citraconimide	AIBN/THF/60°C	0.24 ± 0.06	0.0 ± 0.05	41				III		
71	benzylidene acetone	BPO/-/80°C	1.76 ± 0.10	-0.10 ± 0.10	42				III		
72	benzylidene acetone	-/emulsion/80°C	1.70 ± 0.10	0 ± 0.20	42				II		
73	benzylidene acetone	AIBN/ethyl ether/60°C	2.2	0.19	43	2.187 ± 0.121	0.078 ± 0.351	0.248	I	0.011	s
74	benzylidene acetone	AIBN/ethyl ether/60°C; $SnCl_4$ 0.2 mol/l	1.3	0.16	43	1.332 ± 0.023	0.183 ± 0.109	0.010	I	0.026	s
75	benzylidene acetone	AIBN/ethyl ether/60°C; $SnCl_4$ 0.4 mol/l	1.1	0.13	43	1.126 ± 0.050	0.141 ± 0.267	0.084	I	0.020	s
76	benzylidene acetophenone	BPO/-/80°C	0.84 ± 0.05	0.0 ± 0.1	42	0.850 ± 0.037	0.151 ± 0.330	0.096	I	0.020	
77	benzylidene acetophenone	-/emulsion/80°C	0.90 ± 0.05	0 ± 0.1	42				II		
78	benzylidene acetophenone	AIBN/ethyl ether/60°C	2.0	0.20	43	2.062 ± 0.114	0.407 ± 0.741	0.101	I	0.027	s
79	benzylidene acetophenone	AIBN/ethyl ether/60°C; $SnCl_4$ 0.3 mol/l	1.5	0.17	43	1.515 ± 0.056	0.240 ± 0.480	0.073	I	0.016	s
80	benzylidene acetophenone	AIBN/ethyl ether/60°C; $SnCl_4$ 0.6 mol/l	1.3	0.14	43	1.313 ± 0.034	0.121 ± 0.336	0.073	I	0.008	s
81	N-benzyl iso-maleimide	AIBN/dioxane/70°C	0.18	0.12	44	0.151 ± 0.055	0.079 ± 0.050	0.232	I(I)	0.590	
82	N-benzyl maleimide	AIBN/THF/60°C	0.04	0.02	45				III		
83	benzyl methacrylate	AIBN/-/60°C	0.34	0.53	46	0.315 ± 0.055	0.518 ± 0.061	0.021	I	0.927	
84	benzyl thioacrylate	AIBN/-/60°C	0.15	0.20	47	0.149 ± 0.046	0.172 ± 0.049	0.088	I	0.923	
85	bis-1-methyl-2-chloropropyl fumarate	AIBN/-/60°C	0.25 ± 0.02	-0.05 ± 0.01	48				III		
86	N-bornyl maleimide	BPO/THF/50°C	0.13	0.05	49				III		e
87	bornyl methacrylate	AIBN/bulk/60°C	0.49	0.44	50	0.454 ± 0.323	0.503 ± 0.377	0.534	I(I)	0.792	e,f
88	bornyl methacrylate	AIBN/-/60°C	0.49	0.44	51	0.454 ± 0.323	0.503 ± 0.377	0.534	I(I)	0.792	
89	i-bornyl methacrylate	AIBN/bulk/60°C	0.7	0.32	50	0.613 ± 0.448	0.235 ± 0.295	0.915	I(I)	0.627	e,f
90	i-bornyl methacrylate	AIBN/-/60°C	0.70	0.32	51	0.613 ± 0.448	0.235 ± 0.295	0.916	I(I)	0.626	
91	N-4-bromophenyl iso-maleimide	AIBN/THF/70°C	0.19	0.53	7	0.210 ± 0.435	0.845 ± 0.736	1.81	I(I)	0.496	
92	p-bromostyrene	AIBN/-/30°C	0.60	1.1	52	0.674 ± 0.104	1.103 ± 0.146	0.020	I	0.819	
93	m-bromostyrene	AIBN/-/30°C	0.55	1.3	53	1.581 ± 0.156	0.482 ± 0.078	0.016	I	0.609	e,o

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	δ^a	Class	Q	Remarks
94	β-bromo vinylethylether	BPO/-/80°C	37.5 ± 2.0	0.02 ± 0.02	54				III		
95	N-t-butyl acrylamide	?/propyl alcohol/?	-	-	55	1.895 ± 0.07	0.520 ± 0.041	0.003	I	0.525	m
96	N-t-butyl acrylamide	?/dioxane/?;$ZnCl_2$	-	-	55	0.652 ± 0.035	1.025 ± 0.043	0.002	I	0.780	m
97	n-butyl acrylate	?/-/60°C	0.75	0.15	38	0.747 ± 0.124	0.151 ± 0.251	0.276	I	0.171	s
98	i-butyl acrylate	?/-/60°C	0.73	0.17	38	0.720 ± 0.095	0.179 ± 0.139	0.102	I	0.208	
99	butylbenzylidene cyanoacetate	BPO/-/80°C	0.53	0	40				II		f
100	n-butyl β-butoxyacrylate	AIBN/-/60°C	78	0.01	56				II		o
101	N-n-butyl citraconimide	AIBN/THF/60°C	0.21 ± 0.06	0.05 ± 0.05	41				II		
102	N-i-butyl citraconimide	AIBN/THF/60°C	0.32 ± 0.06	0.07 ± 0.06	41	0.321 ± 0.211	0.060 ± 0.164	1.802	I(I)	0.244	
103	N-tert-butyl citraconimide	AIBN/THF/60°C	0.46 ± 0.04	0.0 ± 0.04	41	0.461 ± 0.087	0.038 ± 0.057	0.288	I(I)	0.128	
104	butyleneglycol mononitrate acrylate	AIBN/-/60°C	0.41	0.20	57	0.409 ± 0.067	0.215 ± 0.088	0.067	I	0.424	e
105	butyleneglycol mononitrate methacrylate	AIBN/-/60°C	0.37	0.40	57	0.354 ± 0.051	0.346 ± 0.076	0.031	I	0.579	e
106	i-butyl fumarate	AIBN/-/60°C	0.34 ± 0.03	0 ± 0.01	48	(0.340 ± 0.037 0.352	-0.019 ± 0.029) 0		I(I)		p
107	N-n-butyl iso-maleimide	AIBN/dioxane/70°C	0.37	0.08	44	0.384 ± 0.082	0.061 ± 0.056	0.197	I	0.243	
108	N-i-butyl iso-maleimide	AIBN/dioxane/70°C	0.44	0.11	44	0.420 ± 0.102	0.080 ± 0.067	0.202	I	0.315	
109	N-tert-butyl iso-maleimide	AIBN/dioxane/70°C	0.54	0.07	44	0.442 ± 0.133	0.023 ± 0.083	1.084	I(I)	0.088	
110	N-butylmaleimide	AIBN/benzene/50°C	0.025 ± 0.025	0.06 ± 0.02	58				III		
111	butyl methacrylate	BPO/-/60°C	-	-	59	0.762 ± 0.173	0.281 ± 0.237	0.191	I	0.311	
112	n-butyl methacrylate	?/-/60°C	0.52	0.43	38	0.530 ± 0.033	0.456 ± 0.050	0.007	I	0.654	
113	n-butyl thioacrylate	AIBN/-/60°C	0.19	0.34	47	0.439 ± 0.140	0.421 ± 0.170	0.129	I	0.695	
114	tert-butyl thioacrylate	AIBN/-/60°C	0.21	0.45	47	0.157 ± 0.034	0.368 ± 0.055	0.032	I	0.802	
115	t-butyl vinyl ketone	AIBN/-/60°C	0.40	0.30	60	0.355 ± 0.119	0.243 ± 0.116	0.160	I(I)	0.669	
116	*2-tert-butyl-6-vinyl naphtalene*	AIBN/benzene/60°C	0.61 ± 0.03	1.00 ± 0.02	61	0.616 ± 0.069	1.014 ± 0.244	0.027	I	0.385	
117	α-chloroacrolein	AIBN/-/60°C	0.078 ± 0.022	0.18 ± 0.026	62	0.025 ± 0.052	0.147 ± 0.072	1.020	I(I)	0.235	
118	α-chloroacrolein diacetate	AIBN/-/60°C	4.6 ± 0.21	0.14 ± 0.018	62	3.82 ± 0.454	0.026 ± 0.086	0.393	I	0.037	
119	α-chloroacrolein dimethylacetal	AIBN/-/60°C	7.75 ± 0.076	0.005 ± 0.036	62	(8.131 ± 0.331 8.27	-0.0282 ± 0.0409) 0		I		p

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
120	2-chloroacrylaldehyde	-/DMSO/60°C	0.06	0.18	63	0.0332 ± 0.0158	0.152 ± 0.021	0.066	I	0.309	
121	α-chloroacrylonitrile	AIBN/-/60°C	0.06	0.13	64	0.128 ± 0.037	0.0287 ± 0.0245	0.237	I(I)	0.307	n
122	3-chloro-2-chloromethyl-1-propene	AIBN/-/50°C	3.8	0.01	65	3.373 ± 0.727	0.0088 ± 0.0988	2.432	I(I)	0.028	e
123	2-chloroethyl acrylate	AIBN/-/60°C	0.43	0.12	20	0.494 ± 0.198	0.135 ± 0.090	0.266	I(I)	0.663	
124	chloromethyl methacrylate	AIBN/benzene/60°C	0.20	0.23	66	0.198 ± 0.016	0.290 ± 0.029	0.008	I	0.633	
125	p-chloromethylstyrene	AIBN/benzene/60°C	0.72	1.31	67	0.621 ± 0.152	1.120 ± 0.199	0.043	I(I)	0.718	
126	chloromethyl vinyl ketone	AIBN/-/60°C	0.13	0.52	60	0.1208 ± 0.0532	0.504 ± 0.094	0.082	I	0.422	
127	4-(2-chlorophenyl)-azo-3-maleimido-N,N-dimethyl-aniline	AIBN/ DMF/50°C	0.05	0.04	68	0.0461 ± 0.0033	0.0301 ± 0.0067	0.016	I	0.344	
128	4-(2-chlorophenyl)-azo-3-maleimido-N,N-dimethyl-aniline	AIBN/DMF/70°C	-	-	35				III		
129	N-(4-chlorophenyl)citraconimide	AIBN/THF/60°C	0.17 ± 0.05	0.09 ± 0.07	2	0.168 ± 0.136	0.056 ± 0.115	1.679	I(I)	0.430	
130	N-(4-chlorophenyl)iso-maleimide	AIBN/THF/70°C	0.22	0.03	7	0.121 ± 0.140	0.221 ± 0.162	0.850	I(I)	0.690	
131	N-(4-chlorophenyl)itaconimide	AIBN/THF/60°C	0.19 ± 0.05	0.32 ± 0.03	3				III		
132	N-(p-chlorophenyl)maleimide	AIBN/benzene/60°C	0.01 ± 0.01	0.05 ± 0.03	4				II		e
133	4-chlorophenyl methacrylate	AIBN/MEK/70°C	0.17	0.40	69	0.215 ± 0.113	0.423 ± 0.138	0.170	I(I)	0.665	
134	4-chlorophenyl methacrylate	AIBN/MEK/70°C; $M_2/ZnCl_2 = 1$	0.09	0.46	69	0.215 ± 0.155	0.574 ± 0.201	0.252	I(I)	0.452	
135	4-chlorophenyl methacrylate	AIBN/MEK/70°C	0.23	0.58	70	0.149 ± 0.135	0.767 ± 0.205	0.186	I(I)	0.436	
136	4-chlorophenyl methacrylate	AIBN/MEK with $ZnCl_2$/70°C	0.21	0.48	70	0.195 ± 0.093	0.767 ± 0.123	0.076	I(I)	0.371	
137	2-p-chlorophenyl-6-methyl pyridazin-3-one	AIBN/DMF/60°C	4.3	0	71				III		
138	m-chlorostyrene	AIBN/-/30°C	-	-	53	2.274 ± 0.916	0.572 ± 0.276	0.194	I(I)	0.912	e,o
139	m-chlorostyrene	AIBN/-/70°C	0.79	1.10	72	0.554 ± 0.147	1.241 ± 0.212	0.045	I	0.777	
140	p-chlorostyrene	AIBN/-/30°C	0.66	1.1	52	0.617 ± 0.124	1.083 ± 0.185	0.034	I	0.903	
141	p-chlorostyrene	AIBN/-/70°C	0.62	1.35	72	0.713 ± 0.142	1.202 ± 0.224	0.037	I	0.992	
142	p-chlorostyrene	AIBN/-/60°C	0.75	1.05	73	0.760 ± 0.359	1.060 ± 0.787	0.351	I(I)	0.549	
143	p-chlorostyrene	redox/emulsion/60°C	0.75	1.05	73	0.744 ± 0.301	1.051 ± 0.451	0.159	I	0.932	
144	chromium tricarbonyl benzylacrylate	AIBN/ethyl acetate/60°C	0.34	0.10	74				III		
145	chlorotrifluoroethylene	acetylperoxide/bulk or benzene /60°C	7.0	0.001	75				II		s

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
146	cinnamic acid	AIBN/benzene/60°C	1.85 ± 0.03	0	76				III		
147	cinnamonitrile	BPO/-/90°C	0.9 ± 0.2	0.1 ± 0.1	77	(0.887 ± 0.634	-0.030 ± 1.344)				t
						0.892	0		I(I)		p
148	cinnamoyl azide	AIBN/-/60°C	0.93 ± 0.08	-0.7 ± 0.8	78				III		
149	p-cresyl methacrylate	AIBN/MEK/70°C	0.19	0.75	69	0.205 ± 0.137	0.774 ± 0.205	0.177	I(I)	0.445	
150	p-cresyl methacrylate	AIBN/MEK/70°C; $M_2/ZnCl_2 = 1$	0.18	0.77	69	0.204 ± 0.148	0.791 ± 0.221	0.203	I(I)	0.367	
151	crotonic acid	AIBN/-/60°C	28.	0	15				III		
152	crotonolactone	AIBN/-/60°C	8.5 ± 5.0	0	79				III		
153	crotononitrile	BPO/benzene/60°C	24.0	0	80	(23.12	-0.011)				
						23.58	0		I(I)		p
154	N-trans-crotonoyl aziridine	AIBN/dioxane/70°C	20	0	27				II		e
155	β-cyanoacrolein	AIBN/THF/60°C	0.09	0	81				II		
156	β-cyanoacrolein	AIBN/THF/60°C	-	-	82				II		
157	α-cyanocinnamamide	AIBN/-/70°C	0.29 ± 0.02	-0.6 ± 1.0	83				III		
158	α-cyanocinnamamide	AIBN/DMF/70°C	0.73 ± 0.02	0.0 ± 0.2	83	(0.683 ± 0.085	-0.097 ± 0.106)				
						0.713	0		I(I)		p
159	α-cyanocinnamamide	thermal/-/130°C	0.69 ± 0.04	-0.1 ± 0.3	83				II		
160	2-cyanoethyl acrylate	AIBN/-/60°C	0.40	0.13	20	0.396 ± 0.066	0.122 ± 0.081	0.111	I(I)	0.242	
161	m-cyanostyrene	AIBN/-/30°C	0.39	0.97	53	0.851 ± 0.534	0.363 ± 0.080	0.139	I	0.354	e, o
162	p-cyanostyrene	AIBN/-/30°C	0.19	1.2	52	0.240 ± 0.088	1.222 ± 0.280	0.084	I(I)	0.655	
163	α-cyanovinyl acetate	AIBN/-/60°C	0.20 ± 0.04	0.16 ± 0.04	84	0.181 ± 0.409	0.147 ± 0.033	0.051	I	0.986	
164	cyclododecyl acrylate	AIBN/-/60°C	0.52 ± 0.11	0.30 ± 0.03	85	0.474 ± 0.144	0.341 ± 0.147	0.131	I(I)	0.744	
165	cyclododecyl acrylate	AIBN/benzene/60°C	0.60 ± 0.06	0.33 ± 0.04	85	0.545 ± 0.084	0.309 ± 0.079	0.039	I(I)	0.492	
166	cyclododecyl acrylate	AIBN/THF/60°C	0.51 ± 0.03	0.30 ± 0.03	85	0.461 ± 0.070	0.301 ± 0.072	0.037	I	0.522	
167	ε-1-cyclohexenyl-ε-caprolactam	?/benzene/60°C	2.0	0.36	86				II		
168	cyclohexyl acrylate	?/-/60°C	0.87	0.28	38	0.885 ± 0.102	0.254 ± 0.141	0.064	I	0.219	
169	cyclohexyl acrylate	AIBN/-/60°C	0.60 ± 0.03	0.16 ± 0.03	85	0.532 ± 0.113	0.159 ± 0.126	0.167	I(I)	0.278	
170	cyclohexyl acrylate	AIBN/benzene/60°C	0.67 ± 0.03	0.18 ± 0.03	85	0.701 ± 0.125	0.166 ± 0.088	0.095	I(I)	0.263	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	δ^a	Class	Q	Remarks
171	cyclohexyl acrylate	AIBN/THF/60°C	0.60 ± 0.03	0.15 ± 0.03	85	0.583 ± 0.095	0.181 ± 0.068	0.061	I(I)	0.400	
172	cyclohexylbenzylidene cyanoacetate	BPO/-/70°C	0.44	0	40				II		f
173	N-cyclohexyl maleimide	AIBN/THF/60°C	0.00	0.07	45				II		
174	cyclopent-4-en-1,3-dione	AIBN/benzene/50°C	0.015 ± 0.015	0.4 ± 0.35							f
			0.024	0.415	87				II		e
175	p-decylstyrene	no/tetraline/200°C	1.07 ± 0.15	1.05 ± 0.17	88	0.880 ± 0.225	0.256 ± 1.315	1.315	I(I)	0.049	b
176	diamino vinyl triazine	AIBN/DMSO/60°C	1.3	0.65	89	1.104 ± 0.157	0.538 ± 0.141	0.037	I	0.767	f
177	di-n-amyl itaconate	AIBN/benzene/60°C	0.34 ± 0.02	0.52 ± 0.02	90	0.317 ± 0.108	0.333 ± 0.197	0.201	I(I)	0.651	
178	trans-dibenzoyl ethylene	AIBN/benzene or dioxane/ 50 - 70°C	-	-	91				II		
179	2,4-dibromo styrene	no/-/30°C	0.22 ± 0.05	1.40 ± 0.15	92	0.145 ± 1.611	0.909 ± 2.882	35.32	I(I)	0.267	a,f,t
180	N,N-di-n-butylacrylamide	AIBN/-/50°C	1.65 ± 0.03	0.32 ± 0.02	93	1.600 ± 0.058	0.294 ± 0.058	0.007	I	0.179	
181	di-i-butyl fumarate	AIBN/-/60°C	0.50 ± 0.03	0 ± 0.01	48	(0.502 ± 0.044	-0.018 ± 0.023)				
						0.515	0		I(I)		p
182	di-n-butyl itaconate	AIBN/benzene/60°C	0.40 ± 0.05	0.38 ± 0.02	90	0.403 ± 0.100	0.294 ± 0.142	0.121	I(I)	0.555	
183	di-(tert-butyl peroxy)fumarate	di-(i-propyl peroxy)dicarbonate/bulk/40°C	0.59 ±	-0.10							e
			0.67 ± 0.2	-0.02 ± 0.02	94				III		f
184	trans-(di-p-chlorobenzoyl)ethylene	AIBN/-/50-70°C	-	-	91	0.0357 ± 0.0091	0.280 ± 0.102	0.093	I	0.617	
185	N,N-diethyl acrylamide	AIBN/dioxane/60°C	1.2	0.2							f
			1.15	0.204	95				II		e
186	m-diethylaminoethylstyrene	AIBN/toluene/60°C	1.0	1.0	96	1.198 ± 0.275	1.211 ± 0.258	0.049	I(I)	0.942	
187	p-diethylaminoethylstyrene	AIBN/toluene/60°C	1.24	0.59	96	1.119 ± 0.189	0.589 ± 0.188	0.054	I(I)	0.627	
188	diethyl fumarate	AIBN/-/60°C	0.31 ± 0.02	0.05 ± 0.02	48	(0.307 ± 0.049	-0.018 ± 0.033)				
						0.317	0		I(I)		p
189	diethyl itaconate	AIBN/benzene/60°C	0.30 ± 0.02	0.33 ± 0.03	90	0.146 ± 0.086	0.269 ± 0.200	0.440	I(I)	0.790	
190	diethyl methacryloyl malonate	AIBN/benzene/60°C	0.17 ± 0.05	0.26 ± 0.05	97	0.101 ± 0.124	0.208 ± 0.145	0.858	I(I)	0.461	f
191	diethyl methylenemalonate	AIBN/-/60°C	0.03	0.08	64	0.0126 ± 0.0102	0.0510 ± 0.0212	0.327	I(I)	0.512	n
192	diglycidyl(1,2-dimethyl-cyclohex-3-ene) dicarboxylate-1,5	AIBN/-/60°C	17.2	0	98				III		

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	δ^a	Class	Q	Remarks
193	5,6-dihydro-2,6-dimethyl-3-vinyloxycarbonyl-2H-pyrane	AIBN/-/60°C	13	0	99	(12.17 ± 4.165 13.12	-0.114 ± 0.446) 0		I(I) I		p
194	5,6-dihydro-2,6-dimethyl-3-vinyl-2H-pyrane	AIBN/-/60°C	0.9	0	100	0.982 ± 0.337	0.130 ± 0.667	1.761	I(I)	0.064	
195	2,3-dihydrofurane	BPO/bulk/80°C	20.7 ± 2	0.043 ± 0.005	101	(19.13 ± 2.55 20.00	-0.049 ± 0.096) 0		I		e p
196	1,1-dihydro-perfluoro-butylacrylate	BPO/-/50°C	0.33	0.07	102	0.330 ± 0.055	0.029 ± 0.036	0.207	I(I)	0.140	
197	trans-(di-p-methoxy-benzoyl)ethylene	AIBN/-/50-70°C	-	-	91				III		t
198	N-(3-dimethylaminophenyl)maleimide	AIBN/DMF/50°C	0.03	0.19	68	0.0253 ± 0.0078	0.182 ± 0.16	0.028	I	0.309	
199	m-dimethylamino styrene	AIBN/-/30°C	1.1	0.661	53	1.027 ± 0.248	0.617 ± 0.264	0.103	I	0.582	
200	N-1,1-dimethyl-butyl acrylamide	?/propanol/?	-	-	55	2.250 ± 0.168	0.528 ± 0.079	0.011	I	0.506	m
201	N-1,1dimethyl-butyl acrylamide	?/dioxane/?; $ZnCl_2$	-	-	55	0.732 ± 0.093	0.973 ± 0.106	0.014	I	0.843	
202	(2,2-dimethyl-1,3-dioxolan-4-yl)methyl acrylate	BPO/toluene or DMF/50°C	0.389 ± 0.04	0.17 ± 0.02	103	0.378 ± 0.167	0.151 ± 0.202	0.593	I(I)	0.373	f
203	[(2,2-dimethyl-1,3-dioxolan-4-yl)methyl]methyl fumarate	BPO/toluene or DMF/50°C	0.17 ± 0.05	0	103	(0.165 ± 0.065 0.167	-0.017 ± 0.276) 0		I(I)		f p
204	4-(2,2-dimethyl-1,3-dioxolan-4-yl)methyl itaconate	BPO/toluene or DMF/50°C	0.14 ± 0.01	0.18 ± 0.04	103	0.134 ± 0.009	0.126 ± 0.059	0.032	I	0.211	f
205	1,1- dimethyl-1-(2-hydroxypropyl)-2-methacryl hydrazinium chloride	AIBN/cellosolve/60°C	0.35	0.33	104	0.309 ± 0.101	0.372 ± 0.293	0.257	I(I)	0.400	
206	dimethyl itaconate	AIBN/benzene/60°C	0.32 ± 0.02	0.25 ± 0.02	90				III		
207	6,8-dimethyl-4-oxo-5-chromanyl methyl acrylate	AIBN/benzene/80°C	0.70	0.32	105	0.705 ± 0.086	0.297 ± 0.067	0.028	I	0.561	
208	N-1,1-dimethyl-pentyl acrylamide	?/propanol/?	-	-	55	2.552 ± 0.223	0.547 ± 0.098	0.016	I	0.495	m
209	N-1,1-dimethyl-pentyl acrylamide	?/dioxane/?; $ZnCl_2$	-	-	55	0.814 ± 0.006	1.023 ± 0.007	0.000	I	0.887	
210	N-1,1-dimethyl-propyl acrylamide	?/propanol/?	-	-	55	2.07 ± 0.096	0.521 ± 0.048	0.004	I	0.509	m
211	N-1,1-dimethyl-propyl acrylamide	?/dioxane/?; $ZnCl_2$	-	-	55	0.686 ± 0.085	0.994 ± 0.101	0.012	I	0.805	m
212	N,N'-dimorpholyl fumaramide	AIBN/methanol/60°C	1.20	0.0	106				II		
213	N,N'-dimorpholyl fumaramide	AIBN/methanol, $ZnCl_2$/ M_2 = 2:1/60°C	1.00	0.0	106				II		
214	N,N'-dimorpholyl fumaramide	AIBN/dimethylacetamide/60°C	-	-	106				II		

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
215	trans-(di-m-nitrobenzoyl)ethylene	AIBN/?/50-70°C	-	-	91				III		
216	di-n-octyl itaconate	AIBN/benzene/60°C	0.35 ± 0.03	0.60 ± 0.02	90				III		
217	3-(2,4-dioxo-5-methyl-1,2,3,4-tetrahydropyrimidin-1-yl)-propion-4-vinylanilid	AIBN/DMF/60°C	0.71	1.67	107	0.680 ± 1.076	1.648 ± 1.833	1.760	I(I)	0.740	s,t
218	3-(2,4-dioxo-1,2,3,4-tetrahydro-pyrimidin-1-yl)propion-4-vinylanilid	AIBN/DMF/60°C	0.74	1.08	107	0.912 ± 0.148	1.126 ± 0.145	0.022	I	0.711	
219	1,1-diphenyl ethylene	no/-/110°C	0.34	0	108	0.334 ± 0.024	0.0060 ± 0.0414	0.493	I(I)	0.016	
220	N,N'-dipiperidinyl fumaramide	AIBN/benzene/60°C	1.0	0.0	106				III		
221	N,N'-dipiperidinyl fumaramide	AIBN/THF/60°C	-	-	106	0.991 ± 0.517	0.0106 ± 0.2487	12.235	I(I)	0.023	
222	di-n-propyl itaconate	AIBN/benzene/60°C	0.25 ± 0.03	0.41 ± 0.04	90	0.140 ± 0.097	0.292 ± 0.152	0.361	I(I)	0.713	
223	N-(4-ethoxycarbonylphenyl)citraconimide	AIBN/THF/60°C	0.16 ± 0.04	0.014 ± 0.04	2	(0.135 ± 0.043 0.144	-0.017 ± 0.040) 0		I(I)		p
224	N-(4-ethoxycarbonylphenyl)itaconimide	AIBN/THF/60°C	0.24 ± 0.03	0.12 ± 0.04	3	0.220 ± 0.072	0.095 ± 0.062	0.213	I(I)	0.509	
225	N-(4-ethoxycarbonylphenyl)iso-maleimide	AIBN/THF/70°C	0.12	0.56	7	0.0251 ± 0.1108	0.433 ± 0.180	1.84	I(I)	0.103	
226	4-ethoxystyrene	AIBN/-/50°C	1.08	0.74	109	0.982 ± 0.189	0.706 ± 0.140	0.038	I(I)	0.955	u
227	ethyl acrylate	AIBN/-/60°C	0.77	0.17	20	0.696 ± 0.159	0.134 ± 0.097	0.164	I(I)	0.333	
228	ethyl acrylate	?/-/60°C	0.77	0.17	38	0.780 ± 0.074	0.167 ± 0.064	0.036	I	0.277	
229	ethyl acrylate	AIBN/benzene/50°C; $[M_1]+[M_2]$= 3 mol/l	0.79	0.18	110	0.790 ± 0.081	0.158 ± 0.046	0.030	I	0.371	
230	ethyl acrylate	AIBN/benzene/50°C; $[M_1]+[M_2]$= 5 mol/l	0.78	0.19	110	0.753 ± 0.041	0.179 ± 0.022	0.007	I	0.418	
231	N-(p-ethylbenzoic)maleimide	AIBN/benzene/60°C	0.02 ± 0.01	0.1 ± 0.07	4				II		e
232	ethyl α-benzylacrylate	AIBN/-/60°C	0.09	0.78	111	0.136 ± 0.168	0.899 ± 0.203	0.279	I(I)	0.178	
233	ethyl α-bromoacrylate	AIBN/-/60°C	0.06	0.50	64	0.0195 ± 0.0422	0.438 ± 0.078	0.385	I(I)	0.085	n
234	ethyl α-chloracrylate	AIBN/-/60°C	0.08	0.30	64	0.0795 ± 0.0730	0.315 ± 0.109	0.318	I(I)	0.458	
235	ethyl α-(3-chlorobenzyl)acrylate	AIBN/-/60°C	0.03	1.16	111				III		
236	ethyl α-(4-chlorobenzyl)acrylate	AIBN/-/60°C	0.07	0.98	111	0.0430 ± 0.0867	1.028 ± 0.129	0.253	I(I)	0.063	
237	ethylcinnamate	AIBN/benzene/75°C	2.7 ± 0.3	0.05	112				III		

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
238	N-ethyl citraconimide	AIBN/THF/60°C	0.24 ± 0.05	0.0 ± 0.05	41				III		
239	ethyl α-(4-cyanobenzyl)acrylate	AIBN/-/60°C	0.05	0.62	111	0.0629 ± 0.0519	0.648 ± 0.087	0.111	I(I)	0.190	
240	ethyleneglycol mononitrate acrylate	AIBN/-/60°C	0.48	0.08	57	0.480 ± 0.059	0.0446 ± 0.0645	0.177	I	0.065	e
241	ethyleneglycol mononitrate methacrylate	AIBN/-/60°C	0.35	0.49	57	0.362 ± 0.052	0.511 ± 0.146	0.041	I	0.643	e
242	ethyl ß-ethoxyacrylate	BPO/-/80°C	23.5 ± 1	0	54				III		
243	ethyl ß-ethoxyacrylate	AIBN/-/60°C	24	0.01	56				II		n
244	2-ethylhexyl acrylate	?/-/60°C	0.72	0.10	38	0.739 ± 0.026	0.061 ± 0.058	0.034	I	0.038	
245	2-ethylhexyl benzylidene cyanoacetate	BPO/-/80°C	0.59	0	40				II		f
246	3-ethylidene-acetylacetone	AIBN/-/60°C	9.0	0	97	(6.082 ± 1.940 6.593	-0.076 ± 0.199) 0		I(I)		p
247	N-ethyl iso-maleimide	AIBN/dioxane/70°C	0.36	0.23	44	0.331 ± 0.129	0.236 ± 0.114	0.189	I(I)	0.845	
248	ethyl α-(4-methoxybenzyl)acrylate	AIBN/-/60°C	0.13	0.67	111	0.245 ± 0.174	0.758 ± 0.228	0.216	I(I)	0.367	
249	ethyl α-(4-methylbenzyl)acrylate	AIBN/-/60°C	0.11	0.68	111	0.327 ± 0.298	0.708 ± 0.243	0.313	I(I)	0.338	
250	N-4-ethylphenyl iso-maleimide	AIBN/THF/70°C	0.20	0.03	7	0.215 ± 0.139	0.050 ± 0.104	1.350	I(I)	0.341	
251	ethyl thioacrylate	AIBN/-/60°C	0.19	0.28	47	0.180 ± 0.038	0.291 ± 0.075	0.054	I	0.767	
252	ß-ethyl thioethyl methacrylate	AIBN/-/50°C	0.42	0.51	113	0.399 ± 0.028	0.496 ± 0.031	0.005	I	0.910	e
253	ethyl vinyl ketone	AIBN/-/60°C	0.7 ± 0.09	0.12 ± 0.02	114	0.716 ± 0.044	0.210 ± 0.026	0.008	I	0.553	
254	ethyl vinyl ketone	AIBN/-/60°C	0.45	0.31	60	0.300 ± 0.155	0.319 ± 0.079	0.128	I(I)	0.601	n
255	trans-ß-ferrocenyl-acrylonitrile	AIBN/-/80°C	-	-	115				III		
256	ferrocenylmethyl acrylate	AIBN/benzene/70°C	2.30 ± 0.3	0.02 ± 0.01	116	(1.887 ± 0.460 1.978	-0.047 ± 0.065) 0		I(I)		p
257	ferrocenylmethyl methacrylate	AIBN/benzene/70°C	3.7 ± 0.2	0.03 ± 0.02	116	(3.666 ± 0.393 3.933	-0.032 ± 0.027) 0		I(I)		p
258	ferrocenylmethyl methacrylate	γ-radiation/benzene/25°C	0.35	0.46	117	0.368 ± 0.023	0.427 ± 0.029	0.004	I	0.883	
259	p-(fluoromethyl)styrene	AIBN/acetonitrile/60°C	0.44	1.3	118	0.474 ± 0.151	1.399 ± 0.236	0.054	I	0.636	
260	formaldehyde-S-vinyl-S'-methyl mercaptal	AIBN/-/60°C	4.25	0.23	119	4.234 ± 0.563	0.230 ± 0.194	0.112	I	0.151	f
261	formaldehyde-S-vinyl-S'-phenyl mercaptal	AIBN/-/60°C	4.22	0.23	119	4.751 ± 0.470	0.288 ± 0.153	0.053	I	0.165	f
262	formaldehyde-S-vinyl-S'-i-propyl mercaptal	AIBN/-/60°C	4.65	0.21	119	4.845 ± 0.536	0.214 ± 0.249	0.129	I	0.101	f

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
263	fumaronitrile	-/chloroform/60°C	0.23 ±0.1	0.01 ± 0.1	120				II		z
264	fumaronitrile	BPO/-/79°C	0.09 ± 0.05	0.0	121				II		
265	fumaronitrile	BPO/$CHCl_3$/49.6°C	0.30 ± 0.02	0.00 ±0.02					III		
266	fumaronitrile	γ/ethanol/25°C	0.14 ± 0.006	0.004 ±0.0 05	123				III		
267	fumaronitrile	γ/dichloroethane/25°C	-	-	123				II		
268	fumaronitrile	-/-/25°C	-	-	124				III		
269	fumaronitrile	-/acetone 0,5 ml/25°C	-	-	124				III		
270	fumaronitrile	-/acetone 3.75 ml/25°C	-	-	124				III		
271	fumaronitrile	-/acetone 12 ml/25°C	-	-	124				II		
272	fumaronitrile	-/acetone 12 ml/70°C	-	-	124				II		
273	fumaronitrile	-/anisole 12 ml/25°C	-	-	124				II		
274	N, N'-fumaroyl dipyrrolidone	AIBN/DMF/60°C	-	-	106				III		
275	N, N'-fumaroyl dipyrrolidone	AIBN/DMSO/60°C	-	-	106				III		
276	N, N'-fumaroyl dipyrrolidone	AIBN/dimethylacetat/60°C	0.11	0.0	106				III		
277	fumaryl chloride	no/-/27°C	0.04	0.0	125				II		
278	glycidyl allyl sulphonate	AIBN/-/60°C	50 ± 5	0.02	126				II		x
279	glycidyl methacrylate	AIBN/-/60	0.45 ± 0.001	0.55 ± 0.002	127	0.450 ± 0.019	0.548 ± 0.033	0.003	I	0.695	
280	glycidyl (1-methyl-cyclohex-3-ene) carboxylate-1	AIBN/-/100°C	21	0	98				III		
281	glycidyl methyl itaconate	AIBN/-/60°C	0.41	0.10	128	0.376 ± 0.036	0.0410 ± 0.0793	0.185	I	0.055	
282	glycidyl vinylsulfonate	AIBN/toluene/100°C	1.19 ± 0.11	0.03 ± 0.08	129				III		
283	heptafluoro-i-propyl methacrylate	AIBN/bulk/60°C	0.082	0.061	130				III		
284	2,4-hexadiene-1-ylacrylate-π-tricarbonyl iron	AIBN/benzene/80°C	1.81	0.26	131	1.907 ± 0.143	0.253 ± 0.024	0.007	I	0.849	
285	hexylbenzylidene cyanoacetate	BPO/-/70°C	0.42	0	40				II		f
286	N-n-hexyl citraconimide	AIBN/THF/60°C	0.43 ± 0.04	0.02 ± 0.03	41				III		
287	N-n-hexyl maleimide	AIBN/THF/60°C	0.00	0.08	45				III		
288	ß-hydroxy-γ-anilinopropyl methacrylate	AIBN/-/60°C	0.23	0.46	132	0.241 ± 0.054	0.444 ± 0.121	0.061	I	0.838	
289	ß-hydroxy-γ-anilinopropyl methacrylate	AIBN/dioxan/60°C	0.41	0.58	132	0.318 ± 0.239	0.274 ± 0.445	1.216	I(I)	0.467	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	δ^a	Class	Q	Remarks
290	β-hydroxy-γ-anilinopropyl methacrylate	AIBN/benzene/60°C	0.19	0.75	132	0.155 ± 0.064	0.808 ± 0.146	0.075	I	0.474	
291	2-hydroxyethyl acrylate	BPO/benzene/60°C	0.38 ± 0.02	0.34 ± 0.03	36	0.321 ± 0.033	0.301 ± 0.040	0.014	I	0.748	
292	2-hydroxyethyl methacrylate	AIBN/-/60°C	0.33	0.85	133	0.330 ± 0.015	0.856 ± 0.020	0.001	I	0.578	
293	β-hydroxy-γ-(N-methylanilino)propyl methacrylate	AIBN/-/60°C	0.3	0.44	132	0.307 ± 0.051	0.453 ± 0.065	0.024	I	0.764	
294	β-hydroxy-γ-(N-methylanilino)propyl methacrylate	AIBN/benzene/60°C	0.26	0.74	132	0.261 ± 0.053	0.733 ± 0.123	0.034	I	0.876	
295	β-hydroxy-γ-(β-naphtylamino)propyl methacrylate	AIBN/benzene/60°C	0.21	0.37	132	0.226 ± 0.077	0.367 ± 0.107	0.099	I	0.789	
296	β-hydroxy-γ-phenoxypropyl methacrylate	AIBN/-/60°C	0.39	0.40	132	0.375 ± 0.032	0.407 ± 0.059	0.012	I	0.654	
297	β-hydroxy-γ-phenoxypropyl methacrylate	AIBN/benzene/60°C	0.58	0.82	132	0.562 ± 0.493	1.233 ± 2.720	1.935	I(I)	0.313	
298	hydroxypropyl acrylate	BPO/benzene/60°C	0.45 ± 0.03	0.36 ± 0.03	36	0.428 ± 0.025	0.339 ± 0.029	0.005	I	0.645	
299	4-iodostyrene	AIBN/benzene/50°C	0.45 ± 0.02	1.03 ± 0.05	134	0.485 ± 0.093	1.044 ± 0.159	0.029	I	0.738	
300	N-iso-propenyl-N′,N′-ethyleneurea	AIBN/THF/60°C	15.7 ± 0.8	0.01 ± 0.03	135	17.46 ± 3.27	0.027 ± 0.116	0.795	I(I)	0.057	
301	itaconic acid	AIBN/dioxane/60°C	0.50	-	15				II		
302	itaconic anhydride	BPO/THF/65°C	0.100	0.60	136	0.072 ± 0.037	0.449 ± 0.095	0.109	I(I)	0.376	
303	itaconic anhydride	BPO/benzene/80°C	0.015	0.78	136				III		
304	itaconic anhydride	?/benzene/70°C	0.018 ± 0.003	0.53 ± 0.1	137				II		q
305	N-lauramidoethyl acrylamide	AIBN/benzene/80°C	0.24 ± 0.07	0.88 ± 0.02	138	0.218 ± 0.171	0.921 ± 0.274	0.234	I(I)	0.359	
306	malealdehyde	AIBN/benzene/70°C	0.08 ± 0.03	0.30 ± 0.05	139	0.277 ± 0.337	0.410 ± 0.416	1.233	I(I)	0.678	a
307	maleic anhydride	BPO/acetone/50°C	0.04	0.015	140	0.0304 ± 0.0134	0.0225 ± 0.0165	0.326	I(I)	0.529	e,n
308	maleic anhydride	BPO/-/50°C	0.019	0.0	141	(0.012 ± 0.005 0.012	~0.016 ± 0.186) 0		I(I)		p
309	maleic anhydride	Cu(II)chelate/-/40°C	0.012	0.035	142				III		e,n
310	maleic anhydride	BPO/-/60°C	-	-	143				II		m
311	maleic anhydride	BPO/benzene/40°C	-	-	144				III		
312	maleic anhydride	BPO/DMSO/60°C	-	-	143				II		m
313	maleic anhydride	BPO/methyl ethyl ketone/60°C	0.05	0.0	143				II		
314	maleic anhydride	BPO/chloroform/60°C	-	-	143				II		m

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
315	maleic anhydride	AIBN/DMSO/60°C	55	0	145				II		o
316	maleimide	AIBN/cyclohexanone/75°C	0.1	0.1	146	0.062 ± 0.028	0.075 ± 0.049	0.301	I(I)	0.684	
371	menthyl acrylate	AIBN/-/50°C	0.84	0.28	147	0.790 ± 0.121	0.210 ± 0.072	0.052	I(I)	0.486	
318	(-)-3-menthyl acrylate	AIBN/bulk/60°C	0.76	0.23	148	0.866 ± 0.747	0.205 ± 0.062	0.259	I(I)	0.396	
319	(-)-3-menthyl maleate	AIBN/benzene/50°C	0.49	0.32	149				III		
320	N-l-menthyl maleimide	hv, BPO/THF/30°C	0.08 ± 0.10	0.20 ± 0.05	150	0.131 ± 0.047	0.196 ± 0.070	0.123	I(I)	1.000	
321	(-)-3-menthyl methacrylate	AIBN/bulk/60°C	0.53	0.58	148	0.548 ± 0.082	0.550 ± 0.125	0.034	I	0.554	
322	4-mercaptostyrene	AIBN/-/60°C	0.596	0.812	151	0.607 ± 0.188	0.907 ± 0.223	0.076	I	0.792	
323	methacrolein	AIBN/-/60°C	0.22 ± 0.02	0.88 ± 0.02	152	0.166 ± 0.038	0.832 ± 0.093	0.026	I	0.536	
324	1-methacrylamido-1-deoxy-D-glucitol	BPO/H_2O-methanol/50°C	0.005	2.09	14	0.003 ± 0.015	2.057 ± 0.146	0.401	I	0.011	
325	methacrylic acid	AIBN/-/60°C	0.14 ± 0.01	-	15				III		
326	methacrylonitrile	BPO/benzonitrile/60°C	0.30 ± 0.01	0.21 ± 0.01	153	(0.350 ± 0.012 0.373	-0.0545 ± 0.0275) 0		I(I)		p
327	methacrylonitrile	BPO/benzene/60°C	0.29 ± 0.01 0.35 ± 0.07	0.23 ± 0.01 0.23 ± 0.03	153	0.239 ± 0.078	0.252 ± 0.072	0.093	I(I)	0.633	h e
328	methacrylonitrile	BPO/benzyl alcohol/60°C	0.14 ± 0.05 0.16 ± 0.07	0.39 ± 0.01 0.40 ± 0.02	153	0.210 ± 0.050	0.340 ± 0.103	0.072	I	0.839	h e
329	methacrylonitrile	BPO/acetonitrile/60°C	0.30 ± 0.01	0.18 ± 0.01	153				III		
330	methacrylonitrile	plasma ind./bulk/22.5°C	0.34	0.2	154	0.234 ± 0.139	0.169 ± 0.146	0.512	I(I)	0.623	
331	α-methacrylophenon	BPO/-/75°C	0.12 ± 0.35	0.18 ± 0.50	155	0.243 ± 0.106	0.254 ± 0.130	0.223	I(I)	0.859	
332	β-methacryloxy ethyl diphenyl thiophosphinate	BPO/-/70°C	0.467	0.380	156	0.442 ± 0.051	0.329 ± 0.045	0.016	I	0.888	
333	N-methacryloyl aziridine	AIBN/dioxane/70°C	0.47	0.41	27	0.521 ± 0.085	0.347 ± 0.073	0.034	I	0.815	e
334	N-(methacryloyl)pyrrolidone	AIBN/benzene/60°C	1.40	0	157				III		
335	N-methacryloyl-2-oxazolidon	AIBN/DMF/70°C	1.10	0.27	158				II		
336	α-methoxyacrylonitrile	AIBN/-/60°C	0.53	0.35	159	0.534 ± 0.069	0.312 ± 0.054	0.022	I	0.687	
337	N-4-methoxyphenyl citraconimide	AIBN/THF/60°C	0.21 ± 0.04	0.0 ± 0.04	2				III		
338	N-4-methoxyphenyl iso-maleimide	AIBN/THF/70°C	0.16	0.16	7	0.091 ± 0.129	0.121 ± 0.133	1.570	I(I)	0.823	
339	m-methoxystyrene	AIBN/-/30°C	0.7	1.7	53	1.742 ± 0.456	0.661 ± 0.232	0.092	I	0.783	e
340	methacrylic acid	AIBN/dioxane-methanol/60°C	0.45	0.47	160	0.533 ± 0.036	0.486 ± 0.036	0.005	I	0.912	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
341	methacrylonitrile	AIBN/-/50°C	0.30 ± 0.01	0.24 ± 0.01	161	0.283 ± 0.025	0.247 ± 0.024	0.008	I	0.922	
342	methacrylonitrile	AIBN/-/50°C	0.35 ± 0.03	0.25 ± 0.02	161	0.271 ± 0.045	0.178 ± 0.061	0.057	I	0.467	M_1 = ß,ß-dideuterostyrene
343	methacrylonitrile	BPO/acetonitrile/60°C	0.30 ± 0.01	0.18 ± 0.01	153				III		u
344	methacrylonitrile	BPO/benzonitrile/60°C	0.30 ± 0.01	0.21 ± 0.01	153				III		
345	N-(4-methoxyphenyl)citraconimide	AIBN/THF/60°C	0.21 ± 0.04	0.0 ± 0.04	2				III		
346	4-methoxystyrene	AIBN/-/60°C	1.13	0.93	162	1.146 ± 0.968	1.015 ± 1.360	1.132	I(I)	0.777	
347	4-methoxystyrene	AIBN/-/30°C	1.0	0.85	52	1.544 ± 1.064	1.078 ± 0.965	0.617	I(I)	0.915	
348	3-methoxystyrene	AIBN/-/30°C	0.7	1.7	53	1.742 ± 0.456	0.661 ± 0.232	0.092	I	0.783	e,o
349	methyl acrylate	?/toluene/60°C	0.74	0.18	38	0.640 ± 0.099	0.147 ± 0.046	0.048	I	0.489	
350	methyl acrylate	redox/emulsion/50°C	1.02 ± 0.14	0.17 ± 0.025	25	0.928 ± 0.183	0.165 ± 0.039	0.047	I(I)	0.705	y
351	methyl atropate	AIBN/-/60°C	0.055	1.0	163	0.0222 ± 0.0392	0.403 ± 0.144	0.633	I(I)	0.177	e,n
352	methyl benzylacrylate	AIBN/-/65°C	0.59 ± 0.05	0.17 ± 0.03	164	0.565 ± 0.0844	0.161 ± 0.062	0.058	I	0.379	f
353	methylbenzylidene cyanoacetate	BPO/-/70°C	0.45	0	40				II		f
354	methyl α-bromoacrylate	AIBN/-/60°C	0.04	1.16	165				III		a
355	methyl α-n-butylacrylate	AIBN/-/65°C	0.80 ± 0.05	0.20 ± 0.05	164	0.668 ± 0.213	0.211 ± 0.158	0.239	I(I)	0.374	f
356	methyl α-sec-butylacrylate	AIBN/-/65°C	2.25 ± 0.05	0	164	(2.099 ± 0.264 2.198	-0.0552 ± 0.0649) 0		I(I)		f p
357	methyl α-i-butylacrylate	AIBN/-/65°C	0.96 ± 0.05	0.20 ± 0.03	164	0.972 ± 0.089	0.166 ± 0.069	0.038	I	0.218	f
358	methyl N-carbamylmaleamate	BPO/aceton/70°C	0.9	0	166				III		
359	methyl α-chloroacrylate	AIBN/-/60°C	0.01	0.84	165				II		
360	N-methyl citraconimide	BPO/-/60°C	0.135 ± 0.065	0.24 ± 0.08	167	0.0721 ± 0.0556	0.0606 ± 0.0831	1.056	I(I)	0.668	
361	methyl crotonate	BPO/benzene/60°C	26.0	0.01	80				II		
362	methyl α-cyanocrotonate	AIBN/bulk/70°C	0.346	-0.083	168	(0.354 ± 0.079 0.380	-0.097 ± 0.159) 0		I(I)		y p
363	3,4-methylenedioxybenzyl methacrylate	TBB/cyclohexanone/30°C	0.40	0.68	169	0.697 ± 1.184	1.337 ± 1.059	1.345	I(I)	0.530	
364	methyl ethacrylate	AIBN/-/65°C	0.82 ± 0.08	0.21 ± 0.02	164	0.833 ± 0.097	0.191 ± 0.053	0.032	I	0.466	f
365	α-methylene glutaronitrile	persulfat-bisulfit/emulsion/25°C	0.45	0.00	170				III		

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
366	methyl α-fluoroacrylate	AIBN/acetonitrile/60°C	0.62	0.15	171	0.655 ± 0.170	0.163 ± 0.113	0.179	I(I)	0.408	
367	methyl α-c-hexylacrylate	AIBN/-/65°C	1.65 ± 0.05	0	164	(1.606 ± 0.135 1.661	-0.0385 ± 0.0411) 0		I(I)		f,n p
368	N-methyl-iso-maleimide	AIBN/dioxane/70°C	0.26	0.26	44	0.269 ± 0.156	0.185 ± 0.138	0.432	I(I)	0.817	
369	methyl linoleate	t-butylperoxide/-/130°C	36	0	172	37.30 ± 24.16	0.0724 ± 0.9655	8.640	I(I)	0.048	s
370	methyl methacrylate	AIBN/-/60°C	0.52	0.46	173	0.522 ± 0.291	0.482 ± 0.075	0.086	I	0.293	
371	methyl methacrylate	Cu(II)chelate/-/100°C	0.42	0.32	142	0.392 ± 0.113	0.207 ± 0.161	0.224	I	0.360	e
372	methyl methacrylate	AIBN/ benzene/60°C	0.51	0.57	132	0.530 ± 0.076	0.518 ± 0.108	0.030	I	0.686	
373	methyl methacrylate	AIBN/dioxane/60°C	0.43	0.54	132	0.427 ± 0.104	0.539 ± 0.069	0.031	I	0.589	
374	methyl methacrylate	?/-/60°C	0.515	0.45	38	0.580 ± 0.060	0.492 ± 0.083	0.017	I	0.553	
375	methyl methacrylate	AIBN/ benzene/60°C	-	-	174	0.612 ± 0.516	1.294 ± 4.365	2.844	I(I)	0.237	s
376	methyl methacrylate	AIBN/ benzene/60°C	0.57 ± 0.032	0.46 ± 0.032	175	0.586 ± 0.023	0.477 ± 0.014	0.001	I	0.717	e
377	methyl methacrylate	AIBN/benzyl alcohol/60°C	0.44 ± 0.054	0.39 ± 0.054	175	0.434 ± 0.029	0.395 ± 0.028	0.005	I	0.968	e
378	methyl methacrylate	AIBN/benzonitrile/60°C	0.48 ± 0.045	0.49 ± 0.045	175	0.497 ± 0.064	0.465 ± 0.060	0.017	I	0.998	e
379	methyl methacrylate	AIBN/phenol/60°C	0.35 ± 0.02	0.35 ± 0.02	175	0.334 ± 0.040	0.352 ± 0.039	0.013	I	0.985	e
380	methyl methacrylate	CT-complex/-/60°C	0.60 ± 0.09	0.48 ± 0.08	176	0.694 ± 0.458	0.495 ± 0.204	0.272	I(I)	0.730	
381	methyl methacrylate	AIBN/-/50°C	0.47 ± 0.03	0.45 ± 0.01	177	0.429 ± 0.101	0.436 ± 0.029	0.016	I	0.269	
382	methyl methacrylate	AIBN/-/50°C; $ZnCl_2$/ MMA = 0.05	0.49 ± 0.03	0.25 ± 0.02	177	0.466 ± 0.124	0.232 ± 0.023	0.026	I	0.402	
383	methyl methacrylate	AIBN/-/50°C; $ZnCl_2$/ MMA = 0.15	0.41 ± 0.1	0.23 ± 0.05	177	0.394 ± 0.345	0.110 ± 0.046	0.366	I(I)	0.512	
384	methyl methacrylate	AIBN/-/50°C; $ZnCl_2$/ MMA = 0.2	0.37 ± 0.06	0.15 ± 0.02	177	0.327 ± 0.193	0.134 ± 0.036	0.159	I(I)	0.476	
385	methyl methacrylate	AIBN/-/50°C; $ZnCl_2$/ MMA = 0.25	0.40 ± 0.08	0.10 ± 0.01	177	0.330 ± 0.053	0.0826 ± 0.0071	0.014	I	0.603	
386	methyl methacrylate	AIBN/-/50°C; $ZnCl_2$/ MMA = 0.40	0.25 ± 0.03	0.056 ± 0.003	177	0.211 ± 0.114	0.0357 ± 0.0131	0.198	I(I)	0.703	
387	methyl methacrylate	AIBN/dioxane/60°C	0.58	0.52	178	0.636 ± 0.220	0.624 ± 0.170	0.095	I(I)	0.793	
388	methyl methacrylate	γ/-/25°C	0.52 ± 0.05	0.49 ± 0.05	179	0.562 ± 0.484	0.470 ± 0.469	0.859	I(I)	0.874	
389	methyl methacrylate	γ/-/25°C; 80 kV/cm	0.42 ± 0.04	0.40 ± 0.04	179	0.471 ± 0.109	0.461 ± 0.194	0.097	I	0.548	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
390	methyl methacrylate	γ/-/50°C	0.52 ± 0.05	0.49 ± 0.05	179	0.449 ± 0.355	0.489 ± 0.144	0.233	I(!)	0.474	
391	methyl methacrylate	γ/-/50°C; 80 kV/cm	0.42 ± 0.04	0.40 ± 0.04	179	0.376 ± 0.503	0.379 ± 0.206	0.728	I	0.478	t
392	methyl methacrylate	AIBN/benzene, 0 Volt/40°C	0.512	0.474	180	0.506 ± 0.051	0.494 ± 0.065	0.013	I	0.610	
393	methyl methacrylate	AIBN/benzene, 200 Volt/40°C	0.632	0.403	180	0.711 ± 0.113	0.407 ± 0.061	0.024	I	0.850	
394	methyl methacrylate	AIBN/benzene, 400 Volt/40°C	0.925	0.387	180	0.957 ± 0.122	0.327 ± 0.080	0.031	I	0.526	
395	methyl methacrylate	AIBN/benzene/60°C	0.52 ± 0.03	0.47 ± 0.04	181	0.494 ± 0.028	0.420 ± 0.026	0.004	I	0.938	
396	methyl methacrylate	AIBN/chlorobenzene/60°C	0.48 ± 0.05	0.50 ± 0.03	181	0.448 ± 0.038	0.484 ± 0.040	0.007	I	0.971	
397	methyl methacrylate	AIBN/benzonitrile/60°C	0.38 ± 0.62	0.62 ± 0.03	181	0.404 ± 0.045	0.608 ± 0.052	0.010	I	0.785	
398	methyl methacrylate	plasma init./bulk/room temp.	0.57 ± 0.01	0.41 ± 0.01	182	0.533 ± 0.103	0.385 ± 0.080	0.040	I	0.963	
399	methyl methacrylate	AIBN/benzonitrile/60°C	-	-	183	0.373 ± 0.108	0.607 ± 0.128	0.062	I(!)	0.721	
400	methyl methacrylate	AIBN/chlorobenzene/60°C	-	-	183	0.482 ± 0.199	0.509 ± 0.208	0.168	I(!)	0.985	
401	methyl methacrylate	AIBN/benzene/60°C	-	-	183	0.501 ± 0.169	0.413 ± 0.154	0.126	I(!)	0.927	
402	methyl α-methoxyacrylate	AIBN/-/60°C	1.10	0.51	159	1.131 ± 0.078	0.513 ± 0.058	0.008	I	0.576	
403	methyl ß-naphthylketoxime acrylate	AIBN/-/50°C	-	-	184				III		t
404	methyl phenylacrylate	AIBN/-/65°C	0.03 ± 0.02	0.4 ± 0.2	164				II		f
405	N-(4-methylphenyl)citraconimide	AIBN/THF/60°C	0.22 ± 0.04	0.0 ± 0.04	2				III		
406	N-(4-methylphenyl)itaconimide	AIBN/THF/60°C	0.15 ± 0.05	0.23 ± 0.03	3	0.129 ± 0.068	0.211 ± 0.092	0.230	I(!)	0.961	
407	N-4-methylphenyl iso-maleimide	AIBN/THF/70°C	0.27	0.01	7				II		
408	2-p-methylphenyl-6-methyl-pyridazin-3-one	AIBN/DMF/60°C	5.4	0	71				III		
409	methyl α-n-propylacrylate	AIBN/-/65°C	0.86 ± 0.08	0.22 ± 0.04	164	0.796 ± 0.103	0.163 ± 0.057	0.045	I	0.418	f,n
410	methyl α-i-propylacrylate	AIBN/-/65°C	1.85 ± 0.07	0	164	(1.735 ± 0.23 1.748	-0.010 ± 0.093) 0		 I(!)		f p
411	N-methylpyrodazinone	AIBN/DMF/60°C	8.43	0.01	185	(7.637 ± 1.222 7.950	-0.077 ± 0.177) 0		 I(!)		p
412	α-methylstyrene	BPO/-/60°C	1.20 ± 0.1 1.17 ± 0.03	0.35 ± 0.1 0.15 ± 0.02	186	1.184 ± 0.123	0.094 ± 0.049	0.054	I	0.265	IR NMR
413	α-methylstyrene	AIBN/-/60°C	1.0	0.15	187	0.960 ± 0.075	0.0132 ± 0.1188	7.031	I	0.012	n
414	α-methylstyrene	no/-/90°C	1.09	0.3	187	1.086 ± 0.067	0.0644 ± 0.0573	0.055	I	0.104	
415	α-methylstyrene	no/-/110°C	1.13	0.4	187	1.071 ± 0.028	0.0335 ± 0.0254	0.020	I	0.041	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
416	α-methylstyrene	no/-/150°C	1.2	0.8	187	(1.189 ± 0.067	-0.019 ± 0.045)				
417	α-methylstyrene	AIBN/toluene, dimethylphtalate/ 60°C	1.12	0.63	188	1.18 1.396 ± 0.098	0 0.476 ± 0.088	0.013	I(I) I	0.485	p u
418	α-methylstyrene	$K_2S_2O_8$/suspension(H_2O)/60°C	-	-	189				III		
419	p-methylstyrene	BPO/-/63°C	0.83	0.96	190	0.826 ± 0.096	0.982 ± 0.100	0.012	I	0.763	
420	N-methyl-3-vinyl carbazole	AIBN/benzene/60°C	0.741 ± 0.007	1.35 ± 0.03	191	0.735 ± 0.067	1.404 ± 0.146	0.009	I	0.795	
421	methyl vinyl ketone	AIBN/acetonitrile-ethanol/60°C	0.23	0.41	60	0.235 ± 0.021	0.413 ± 0.025	0.006	I	0.762	
422	methyl vinyl ketone	AIBN/ethanol/60°C	0.20	0.46	60	0.194 ± 0.016	0.457 ± 0.021	0.004	I	0.629	
423	methyl vinyl ketone	AIBN/acetonitrile/60°C	0.26	0.41	60	0.260 ± 0.012	0.407 ± 0.014	0.002	I	0.821	
424	methyl vinyl ketone	AIBN/dioxane/60°C	0.30	0.40	60	0.288 ± 0.016	0.361 ± 0.013	0.002	I	0.553	
425	methyl vinyl ketone	AIBN/-/60°C	0.27	0.40	60	0.233 ± 0.024	0.344 ± 0.019	0.006	I	0.507	
426	2-methyl-N-vinylimidazole	AIBN/bulk/60°C	8.97 ± 0.10	0.069 ± 0.025	192	8.770 ± 0.714	0.051 ± 0.039	0.063	I	0.115	
427	2-methyl-N-vinylimidazole	AIBN/bulk/60°C	8.66 ± 0.02 9.4	0.10 ± 0.01 0.1	193	8.725 ± 2.272	0.097 ± 0.130	0.352	I	0.196	e y
428	N-(α-methyl-vinyl) indazole	AIBN/-/70°C	0.75	0.5	194	0.782 ± 0.127	0.520 ± 0.173	0.542	I	0.471	e
429	monobutyl maleate	BPO/aceton/60°C	-	-	195				III		
430	monobutyl maleate	BPO/acetone/60°C	0.77	-0.02	195				III		
431	monobutyl maleate	BPO/bulk/60°C	-	-	195				III		
432	monomethyl maleate	BPO/aceton/60°C	0.60	-0.05	195				III		
433	monomethyl maleate	BPO/acetone:methanol/60°C	0.95	-0.03	195				III		
434	monomethyl maleate	BPO/3 mol methanol:1 mol M_2/ 60°C	-	-	195				III		
435	monomethyl maleate	BPO/1 mol methanol:1 mol M_2/ 60°C	-	-	195				III		
436	N-1-naphthyl maleimide	AIBN/THF/60°C	0.15	0.0	196				III		
437	ß-nitrostyrene	BPO/-/80°C	0.4	0	197				III		t,x
438	N-n-octylacrylamide	AIBN/-/50°C	2.7 ± 0.1	0.2 ± 0.05	93	2.715 ± 0.244	0.258 ± 0.119	0.041	I	0.189	
439	N-tert-octylacrylamide	AIBN/benzene/50°C	2.8 ± 0.1	0.25 ± 0.06	93	2.991 ± 1.744	0.202 ± 0.524	1.515	I(I)	0.182	
440	octyl acrylate	?/-/60°C	0.41	0.125	38	0.391 ± 0.112	0.0145 ± 0.5325	10.52	I(I)	0.009	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	δ	Class	Q	Remarks
441	N-oxyethyl maleimide	AIBN/methanol/60°C	0.04 ± 0.02	0.01 ± 0.01	198	0.039 ± 0.011	0.0027 ± 0.0099		I(I)		d
442	N-oxymethyl maleimide	AIBN/dioxane/60°C	0.01 ± 0.01	0.06 ± 0.03	198				III		
443	4-oxypropylstyrene	AIBN/-/50°C	0.50 ± 0.05	0.56 ± 0.05	199	0.475 ± 0.339	0.403 ± 0.758	1.343	I(I)	0.423	
444	p-(2-oxy-n-propyl)-styrene	AIBN/dioxane/?	0.97	0.91	200	0.986 ± 0.502	0.940 ± 0.448	0.243	I(I)	0.992	e,n
445	4-ClPd(PBu_3)$_2$-styrene	AIBN/benzene/55°C	0.149 ± 0.01	0.45 ± 0.02	201	1.335 ± 0.297	0.357 ± 0.180	0.112	I	0.444	
446	pentaerythritol trinitrate acrylate	AIBN/-/60°C	0.38	0.26	202	0.497 ± 0.158	0.325 ± 0.190	0.186	I(I)	0.569	
447	perdeutero methacrylonitrile	AIBN/-/50°C	0.39 ± 0.03	0.25 ± 0.02	161	0.304 ± 0.173	0.183 ± 0.224	0.697	I(I)	0.461	M_1 = (ß, ß-dideuterostyrene)
448	phenylacethylene	AIBN/-/60°C	0.34 ± 0.01	-	203	0.327 ± 0.031	0.327 ± 0.02	0.082	I	0.196	
449	N-phenyl citraconimide	AIBN/THF/60°C	0.18 ± 0.04	0.004 ± 0.05	2	(0.165 ± 0.033 0.176	-0.017 ± 0.026) 0		I(I)		p
450	N-phenyl iso-maleimide	AIBN/THF/70°C	0.25	0.26	7	0.201 ± 0.386	0.226 ± 0.369	3.15	I(I)	0.756	
451	N-phenyl iso-maleimide	AIBN/dioxane/70°C	0.09	0.05	44	0.052 ± 0.026	0.042 ± 0.025	0.300	I(I)	0.853	
452	N-phenyl itaconimide	AIBN/THF/60°C	0.14 ± 0.03	0.12 ± 0.03	3	0.103 ± 0.093	0.093 ± 0.094	0.916	I(I)	0.878	
453	N-phenyl maleimide	AIBN/benzene/60°C	0.05 ± 0.05	0.13 ± 0.05	4				II		e,n
454	N-phenyl maleimide	AIBN/THF/60°C	0.08 ± 0.05	0.12 ± 0.05	198				II		
455	N-phenyl maleimide	AIBN/-/35°C	0.012	0.047	204				III		
456	phenyl methacrylate	AIBN/MEK/70°C	0.43	0.32	69	0.404 ± 0.133	0.301 ± 0.117	0.127	I	0.955	
457	phenyl methacrylate	AIBN/MEK/70°C; $ZnCl_2$/ M_2 = 1	0.10	0.45	69	0.216 ± 0.116	0.405 ± 0.146	9.199	I(I)	0.732	
458	phenyl methacrylate	AIBN/MEK,no $ZnCl_2$/70°C	0.41	0.31	70	0.397 ± 0.141	0.297 ± 0.123	0.147	I(I)	0.958	
459	phenyl methacrylate	AIBN/MEK with $ZnCl_2$/70°C	0.12	0.39	70				III		
460	2-phenyl-6-methyl pyridazin-3-one	AIBN/DMF/60°C	4.7	0	71				III		
461	2-phenyl-6-methyl pyridazin-3-one	AIBN/DMF/60°C; BF_3 OEt_2 = 0.2 mol/l	7.10	0.01	205				III		
462	propargyl acetate	AIBN/-/60°C	53.0	0.00	206	(46.10 ± 22.16 47.95	-0.043 ± 0.409) 0		I(I)		p
463	i-propenyl-4-acetamidoanilino-amino-s-triazine	AIBN/DMSO/60°C	0.40	0.52	207	0.483 ± 0.093	0.519 ± 0.102	0.038	I	0.967	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	δ^a	Class	Q	Remarks
464	4-iso-propenyl acetophenone	AIBN/-/60°C	0.37	0.95		0.356 ± 0.329	0.786 ± 1.457	1.710	I(!)	0.382	
465	4-iso-propenyl acetophenonoxime	AIBN/-/60°C	0.64	0.91		0.599 ± 0.070	0.599 ± 0.410	0.080	I	0.180	
466	i-propenyl-4-aminoanilino-amino-s-triazine	AIBN/DMSO/60°C	0.46	0.50	207	0.427 ± 0.087	0.511 ± 0.092	0.036	I	0.883	
467	2-i-propenyl-4-amino-6-anilino-s-triazine	AIBN/DMSO/60°C	0.39	0.78	208	0.423 ± 0.130	0.895 ± 0.196	0.068	I	0.792	e
468	2-i-propenyl-4-amino-6-dimethylamino-s-triazine	AIBN/DMSO/60°C	0.32	1.17	208	0.240 ± 0.312	1.130 ± 0.589	0.677	I(!)	0.400	e
469	2-i-propenyl-4-amino-6-N-methylanilino-s-triazine	AIBN/DMSO/60°C	0.29	1.39	208	0.275 ± 0.064	1.517 ± 0.222	0.034	I	0.720	e
470	2-i-propenyl-4-anilino-6-(m-aminoanilino)-s-triazine	AIBN/DMSO/60°C	0.29	0.67	209	0.269 ± 0.087	0.710 ± 0.125	0.057	I	0.539	
471	2-i-propenyl-4-anilino-6-(p-aminoanilino)-s-triazine	AIBN/DMSO/60°C	0.32	0.86	209	0.278 ± 0.060	0.875 ± 0.092	0.023	I	0.492	
472	propenyl-anilino-amino-s-triazine	AIBN/DMSO/60°C	12.49 ± 0.5	0	210	(12.17 ± 1.99 12.70	-0.054 ± 0.166) 0		I(!)		p
473	2-i-propenyl-4-anilino-6-(m-nitroanilino)-s-triazine	AIBN/DMSO/60°C	0.22	2.05	209	0.153 ± 0.148	1.908 ± 0.378	0.192	I(!)	0.201	
474	2-i-propenyl-4-anilino-6-(p-nitroanilino)-s-triazine	AIBN/DMSO/60°C	0.21	2.10	209	0.144 ± 0.024	2.100 ± 0.064	5.041	I	0.189	
475	2-i-propenyl-4-anilino-6-m-(3-phenylureido)-anilino-s-triazine	AIBN/DMSO/60°C	0.33	0.64	209	0.266 ± 0.167	0.466 ± 0.340	0.457	I(!)	0.921	
476	2-i-propenyl-4-anilino-6-p-(3-phenylureido)-anilino-s-triazine	AIBN/DMSO/60°C	0.29	0.60	209	0.178 ± 0.155	0.347 ± 0.344	0.860	I(!)	0.943	
477	2-i-propenyl-4,6-bis(anilino)-s-triazine	AIBN/DMSO/60°C	0.28	0.99	211	0.246 ± 0.082	0.962 ± 0.137	0.047	I	0.420	
478	2-i-propenyl-4,6-bis-(p-methylanilino)-s-triazine	AIBN/DMSO/60°C	0.32	0.83	211	0.285 ± 0.041	0.818 ± 0.061	0.011	I	0.530	
479	propenyl-2-chloroanilino-amino-s-triazine	AIBN/DMSO/60°C	11.02 ± 0.7	0	210	(8.745 ± 2.428 9.483	-0.091 ± 0.181) 0		I(!)		p
480	i-propenyl-4-chloroanilino-amino-s-triazine	AIBN/-/60°C	0.48	0.66	212	0.439 ± 0.049	0.619 ± 0.056	0.010	I	0.802	
481	propenyl-4-chloroanilino-amino-s-triazine	AIBN/DMSO/60°C	11.62 ± 0.7	0	210				III		
482	i-propenyl-m-chloroanilino-amino-s-triazine	AIBN/DMSO/60°C	0.33	0.62	213	0.279 ± 0.078	0.608 ± 0.099	0.045	I	0.589	
483	2-i-propenyl-4-(p-chloroanilino)-6-anilino-s-triazine	AIBN/DMSO/60°C	0.26	1.10	211	0.293 ± 0.105	1.194 ± 0.187	0.056	I	0.455	
484	2-i-propenyl-4,6-bis-(p-chloroanilino)-s-triazine	AIBN/DMSO/60°C	0.24	1.07	211	0.195 ± 0.095	1.076 ± 0.175	0.079	I	0.338	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	δ □	Class	Q	Remarks
485	2-i-propenyl-4,6-diamino-s-triazine	AIBN/DMSO/60°C	0.66	0.97	208	0.598 ± 0.192	0.856 ± 0.251	0.094	I	0.932	e
486	2-i-propenyl-1,3,4-dioxazidin-5-one	AIBN/-/60°C	0.19	0.45	214	0.0432 ± 0.1082	0.328 ± 0.212	1.618	I(I)	0.236	
487	N-i-propenyl-N',N'-ethylene urea	AIBN/THF/60°C	15.7 ± 0.8	0.01 ± 0.03	135	17.46 ± 3.27	0.027 ± 0.116	0.795	I(I)	0.057	
488	2-i-propenyl-4-(p-hydroxymethylanilino)-6-anilino-s-triazine	AIBN/DMSO/60°C	0.32	0.95	211	0.337 ± 0.153	0.888 ± 0.222	0.114	I	0.556	
489	2-i-propenyl-4,6-bis-(p-hydroxymethylanilino)-s-triazine	AIBN/DMSO/60°C	0.41	0.86	211	0.375 ± 0.104	0.915 ± 0.147	0.045	I	0.569	
490	i-propenyl-4-methoxyanilino-amino-s-triazine	AIBN/-/60°C	0.43	0.81	212	0.394 ± 0.075	0.757 ± 0.096	0.024	I	0.666	
491	propenyl-N-methylanilino-amino-s-triazine	AIBN/DMSO/60°C	8.34 ± 0.9	0	210	(7.49 ± 1.25 7.95	-0.075 ± 0.135) 0		I(I)		p
492	propenyl-4-methylanilino-amino-s-triazine	AIBN/DMSO/60°C	12.35 ± 0.6	0	210				III		
493	propenyl-4-methoxyanilino-amino-s-triazine	AIBN/DMSO/60°C	13.73 ± 0.6	0	210	(10.84 ± 4.49 13.33	-0.136 ± 0.315) 0		I(I)		p
494	i-propenyl-N-methyl-4-aminoanilino-amino-s-triazine	AIBN/DMSO/60°C	0.37	0.57	215	0.294 ± 0.135	0.425 ± 0.149	0.161	I(I)	0.896	
495	2-i-propenyl-4-(p-methylanilino)-6-anilino-s-triazine	AIBN/DMSO/60°C	0.29	1.06	211	0.255 ± 0.076	1.050 ± 0.132	0.038	I	0.420	
496	i-propenyl-4-methylanilino-amino-s-triazine	AIBN/DMSO/60°C	0.43	0.61	212	0.393 ± 0.156	0.607 ± 0.185	0.121	I	0.752	
497	n-propenyl methyl ketone	BPO/benzene/60°C	0.01	18.110	80	18.12 ± 6.09	0.078 ± 0.295	1.276	I(I)	0.116	o
498	i-propenyl methyl ketone	BPO/-/60°C	0.28 ± 0.03	0.35 ± 0.02	216	0.221 ± 0.059	0.349 ± 0.078	0.060	I	0.768	f
499	i-propenyl-N-methyl-4-nitroanilino-amino-s-triazine	AIBN/DMSO/60°C	0.19	1.70	215	0.164 ± 0.031	1.685 ± 0.076	0.008	I	0.249	
500	i-propenyl-4-nitroanilino-amino-s-triazine	AIBN/DMSO/60°C	0.32	1.05	215	0.254 ± 0.152	0.912 ± 0.223	0.148	I(I)	0.397	
501	2-i-propenyl-1,3,4-oxadiazoline-5-thione	AIBN/THF/70°C	0.02	1.56	217	0.0035 ± 0.0469	1.575 ± 0.330	2.767	I(I)	0.017	
502	i-propenyl-o-toluidino-amino-s-triazine	AIBN/DMSO/60°C	0.40	0.62	213	0.315 ± 0.178	0.429 ± 0.193	0.254	I(I)	0.754	
503	i-propenyl-m-toluidino-amino-s-triazine	AIBN/DMSO/60°C	0.40	0.65	213	0.488 ± 0.164	0.672 ± 0.183	0.092	I	0.777	
504	propiolaldehyde	AIBN/-/60°C	0.32	0.21	218	0.409 ± 0.235	0.576 ± 0.297	0.296	I(I)	0.928	n
505	i-propyl acrylate	AIBN/-/60°C	0.76	0.26	20	0.755 ± 0.060	0.194 ± 0.030	0.012	I	0.616	
506	N-n-propyl citraconimide	AIBN/THF/60°C	0.27 ± 0.04	0.02 ± 0.04	41				III		
507	N-i-propyl citraconimide	AIBN/THF/60°C	0.031 ± 0.040	0.003 ± 0.050	41				III		

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
508	propyleneglycol mononitrate methacrylate	AIBN/-/60°C	0.36	0.50	57	0.3689 ± 0.059	0.578 ± 0.094	0.026	I	0.862	e
509	N-i-propyl iso-maleimide	AIBN/dioxane/70°C	0.53	0.06	44	0.465 ± 0.104	0.002 ± 0.059	5.552	I(I)	0.010	
510	n-propyl ß-propoxyacrylate	AIBN/-/60°C	42	0.01	56				II		o
511	i-propyl-styrene	BPO/-/70°C	1.22	0.89	219	1.219 ± 0.062	0.888 ± 0.065	0.004	I	0.782	e
512	n-propyl thioacrylate	AIBN/-/60°C	0.18	0.32	47	0.180 ± 0.067	0.375 ± 0.165	0.164	I(I)	0.843	
513	i-propyl vinyl ketone	AIBN/-/60°C	0.40	0.30	60	0.359 ± 0.110	0.268 ± 0.101	0.116	I(I)	0.742	n
514	styrene (deuterated)	AIBN/toluene/60°C	1	1	220	0.963 ± 0.079	1.118 ± 0.096	0.007	I	0.984	
515	styrene tricarbonylchromium	AIBN/benzene/70°C	1.39	0	221				III		
516	styryl isocyanate	AIBN/-/60°C	7.8 ± 0.6	0 ± 0.3	78	(7.372 ± 0.922 7.885	-0.125 ± 0.183) 0		I(I)		p
517	tetrachlorocyclopropene	AIBN/-/80°C	-	-	222				III		
518	tetrachlorocyclopropene	AIBN/-/80°C	5.7 ± 0.4	-	223				III		n
519	tetrachloroethylene	BPO/-/60°C	200 ± 20	-	31				III		
520	tetrafluoroethylene	γ/-/80°C 100°C	5.2 4.9	0.01 0.02	224				III		t
521	tetrafluoroethylene	^{60}Co/bulk/22°C	6	0	225				III		
522	tetrahydrofurfuryl acrylate	BPO/bulk/70°C	0.501	0.485	226	0.475 ± 0.186	0.489 ± 0.196	0.157	I	0.945	e
523	tetrahydropyranyl acrylate	AIBN/benzene/70°C	0.53	0.13	227				III		u
524	tetrahydropyranyl methacrylate	AIBN/benzene/70°C	0.42	0.59	227	0.486 ± 0.055	0.565 ± 0.081	0.016	I	0.842	
525	thiomaleic anhydride	AIBN/bulk/60°C	0.045	0.005	228				II		e
526	N-(p-tolyl)-maleimide	AIBN/benzene/60°C	0.25 ± 0.05	0.08 ± 0.05	4				II		e
527	p-tolyl methacrylate	AIBN/MEK, no $ZnCl_2$/70°C	0.24	0.75	70	0.215 ± 0.118	0.400 ± 0.144	0.198	I(I)	0.708	
528	p-tolyl methacrylate	AIBN/MEK with $ZnCl_2$/70°C	0.14	0.63	70	0.213 ± 0.147	0.566 ± 0.189	0.231	I(I)	0.457	
529	1-p-tolyl-2-methyl-1,2,3,6-tetrahydro-3,6-pyridazindione	AIBN/DMF/60°C	0.75	0.01	229				II		
530	tricarbonyl chromium-h^6-phenylethyl acrylate	AIBN/ethyl acetate/70°C	0.5	0.1	230	0.502 ± 0.123	0.218 ± 0.179	0.200	I(I)	0.378	
531	tricarbonyl chromphenyl ethyl methacrylate	AIBN/ethyl acetate/70°C	1.35 ± 0.15	0.04 ± 0.04	231	1.481 ± 0.622	0.0522 ± 0.0277	0.223	I(I)	0.860	
532	4-trimethoxysilylstyrene	BPO/-/70°C	0.71 ± 0.02	1.4 ± 0.1	232	0.774 ± 0.126	1.581 ± 0.342	0.035	I	0.717	
533	trimethyl acrylyl hydrazinium chloride	AIBN/methanol-ethyl cellosolve/70°C	0.58	0.46	233	0.447 ± 0.073	0.341 ± 0.167	0.079	I(I)	0.467	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
534	trimethylamine-4-vinylbenzimide	AIBN/acetonitrile/70°C	0.47 ± 0.05	0.63 ± 0.07	234	0.598 ± 0.105	0.747 ± 0.162	0.038	I	0.761	n
535	trimethyl methacrylyl hydrazinium chloride	AIBN/ethyl cellosolve/70°C	0.51	0.23	235	0.448 ± 0.049	0.179 ± 0.090	0.055	I	0.247	
536	2,3,4-trimethyl-3-pentyl methacrylate	AIBN/benzene/60°C	-	-	236	0.596 ± 0.081	0.257 ± 0.059	0.031	I(I)	0.689	
537	4-trimethylsilylstyrene	BPO/-/70.3°C	1.0 ± 0.2	1.0 ± 0.2	232	1.255 ± 0.472	1.153 ± 0.718	0.234	I(I)	0.688	
538	N-vinyl acetanilide	AIBN/-/60°C	22.3 ± 0.19	0.009 ± 0.03	237	24.19 ± 3.06	0.025 ± 0.071	0.365	I	0.041	
539	vinyl acetate	Cu(II)chelate/-/100°C	16.0 ± 5.6	0.0 ± 0.30	142	18.80 ± 7.86	0.0139 ± 0.1729	5.195	I(I)	0.030	e,x
540	vinyl acetate	BPO/-/70°C	61 ± 1	0.056 ± 0.003	238	61.25 ± 6.54	0.0560 ± 0.0342	0.065	I	0.002	s,x
541	4-vinyl acetophenone	AIBN/-/60°C	0.25	1.15	239	0.237 ± 0.077	1.130 ± 0.804	0.231	I(I)	0.363	
542	4-vinyl acetophenonoxime	AIBN/-/60°C	0.54	1.04	239	0.526 ± 0.069	1.081 ± 0.292	0.035	I	0.530	
543	2-vinyl-4-amino-6-anilino-s-triazine	AIBN/DMSO/60°C	0.60	0.24	208	0.553 ± 0.093	0.180 ± 0.068	0.063	I	0.462	e
544	2-vinyl-4-amino-6-p-anisidino-s-triazine	AIBN/DMSO/60°C	0.78	0.29	208	0.784 ± 0.090	0.256 ± 0.062	0.028	I	0.483	e
545	2-vinyl-4-amino-6-p-cyananilino-s-triazine	AIBN/DMSO/60°C	0.64	0.31	208	0.637 ± 0.058	0.267 ± 0.070	0.024	I	0.314	e
546	2-vinyl-4-amino-6-dimethylamino-s-triazine	AIBN/DMSO/60°C	0.70	0.81	208	0.655 ± 0.279	0.804 ± 0.304	0.161	I	0.833	e
547	2-vinyl-4-amino-6-N-methyl-anilino-s-triazine	AIBN/DMSO/60°C	0.50	0.58	208	0.477 ± 0.050	0.557 ± 0.055	0.010	I	0.933	e
548	2-vinyl-4-amino-6-p-toluidino-s-triazine	AIBN/DMSO/60°C	0.80	0.30	208	0.762 ± 0.059	0.244 ± 0.041	0.013	I	0.464	e
549	2-vinyl-4-amino-6-o-toluidino-s-triazine	AIBN/dioxane/60°C	0.45	0.93	240	0.307 ± 0.725	0.561 ± 0.741	3.123	I(I)	0.479	e,n
550	3-vinylbenzenesulfanic acid fluoride	AIBN/benzene/75°C	0.80	1.25	241	0.788 ± 0.183	1.268 ± 0.236	0.043	I	0.822	
551	4-vinylbenzenesulfonic acid fluoride	AIBN/butanone/75°C	0.25	1.30	241	0.171 ± 0.045	1.372 ± 0.188	0.036	I	0.622	
552	vinyl benzoate	$K_2S_2O_8$/emulsion/60°C	29.58	0.03	242				III		
553	4-vinyl benzoic acid	AIBN/-/60°C	0.28	1.04	239	0.258 ± 0.058	1.131 ± 0.481	0.095	I	0.529	
554	4-vinyl benzophenone	AIBN/bulk/60°C	0.18 ± 0.08	3.0 ± 0.3	243	0.110 ± 0.152	2.578 ± 0.829	0.444	I(I)	0.218	
555	4-vinyl benzophenone	AIBN/-/60°C	0.18 ± 0.08	3.0 ± 0.3	244	0.127 ± 0.018	0.551 ± 9.440	2.451	I(I)	0.010	
556	p-vinyl benzylchloride	AIBN/toluene/60°C	0.70	1.59	245	0.596 ± 0.296	1.665 ± 0.464	0.138	I(I)	0.579	
557	p-vinylbenzyl methyl carbinol	AIBN/dioxane/?	0.97	0.91	200	0.986 ± 0.502	0.940 ± 0.448	0.243	I	0.992	e
558	vinyl n-butyl ether	Cu(II)chelate/-/100°C	15	0	142				III		e
559	N-vinyl caprolactame	AIBN/DMF/70°C	18.5 - 19.1	0.014 ± 0.027	246				II		
560	N-vinyl carbazole	AIBN/benzene/60°C	5.6 ± 0.5	0.062 ± 0.009	247				II		
561	vinyl (bis-chloroethyl) phosphate	BPO/-/50°C	2.43	0.03	248	2.470 ± 0.891	0.026 ± 0.487	6.71	I(I)	0.0184	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
562	1-vinyl-4-chloronaphtalene	BPO/-/60°C	0.85 ± 0.1	0.8 ± 0.1	249	0.763 ± 0.677	0.747 ± 0.451	0.535	I(I)	0.646	
563	2-vinyl-6-chloronaphtalene	BPO/benzene/60°C	0.4 ± 0.1	1.5 ± 0.2	249	0.610	4.278		I(I)		C, H
			0.4	1.5		0.391 ± 0.597	2.437 ± 1.385	0.868	I(I)	0.250	Cl
564	(η^5-vinylcyclopentadienyl)tricarbonylmethyltungsten	AIBN/benzene/60°C	1.55 ± 0.15	0.16 ± 0.025	250	1.395 ± 0.148	0.108 ± 0.073	0.071	I(I)	0.112	
565	N-vinyl-5-decyl-2-oxazolidon	AIBN/-/60°C	14.3	0.059	251				II		
566	2-vinyl-4,6-diamino-s-triazine hydrochloride	AIBN/DMSO/60°C	0.09	0.14	208				II		e
567	2-vinyl-4,6-dianilino-s-triazine	AIBN/DMSO/60°C	0.53	0.40	208	0.374 ± 0.3712	0.300 ± 0.331	1.092	I(I)	0.941	e
568	vinyl-dibutylphosphinoxyde	AIBN/-/60°C	17 ± 5	0	252				III		
569	2-vinyl-1,1-dichloro-cyclopropane	BPO/-/60°C	17.4	0.05	253	17.98 ± 0.590	0.000 ± 0.034		I		
570	O-vinyl-N-diethylcarbamate	AIBN/-/66°C	32.0 ± 5	0.03 ± 0.01	254				III		
571	S-vinyl-N-diethylthiocarbamate	AIBN/-/66°C	4.4 ± 0.6	0.14 ± 0.03	254	4.451 ± 1.245	0.093 ± 0.466	1.399	I(I)	0.062	
572	4-vinyl-2,4-dimethoxybenzophenone	AIBN/benzene/60°C	0.41 ± 0.02	2.12 ± 0.17	255	0.364 ± 0.156	2.51 ± 1.69	0.289	I(I)	0.639	s
573	N-vinyl-3,5-dimethylpyrazole	AIBN/-/60°C	-	-	256	8.663 ± 0.196	0.0487 ± 0.0106	0.005	I	0.104	
574	N,N-vinyl methyl 4-toluenesulfonamide	BPO/-/60°C	12.3	0	257				III		
575	2-vinyl-4,6-dimethyltriazine	AIBN/benzene/60°C	0.12	0.92	258	0.131 ± 0.086	0.930 ± 0.177	0.126	I	0.269	
576	2-vinyl-1,3-dioxolane	AIBN/-/60°C	44.9	0.02	259	47.55 ± 4.08	0.0359 ± 0.0589	0.141	I	0.054	e
577	vinyl-diphenylphosphine	AIBN/-/60°C	7 ± 1	0	252				III		
578	vinyl-diphenylphosphineoxyde	AIBN/ benzene/60°C	5 ± 1	0	252				III		
579	vinyl-diphenylphosphinesulfide	AIBN/benzene/60°C	2.1 ± 0.3	0	252				III		
580	1-vinyl-3-n-dodecyl imidazolium iodide	ACVA/water /60°C	3.01	0.09	260				III		
581	vinylencarbonate	AIBN/-/60°C	8-20	0	79				III		
582	N-vinyl-N',N'-ethyleneurea	AIBN/THF /60°C	14.5 ± 0.9	0.05 ± 0.04	135				III		
583	vinyl ethyl ether	BPO/-/80°C	80 ± 40	0	54				III		
584	vinyl ethyl oxalate	AIBN/-/60°C	8.0	0.1	261				III		
585	2-vinyl-5-ethylpyridine	AIBN/-/60°C	0.79 ± 0.03	1.2 ± 0.2	262	0.734 ± 0.118	1.097 ± 0.143	0.021	I	0.789	
586	2-vinyl-5-ethylpyridine-N-oxide	AIBN/ethanol/60°C	0.10 ± 0.01	2.6 ± 0.3	263	0.064 ± 0.108	2.273 ± 0.876	0.653	I(I)	0.214	
587	vinyl ferrocene	-/benzene/70°C	4 ± 1	0.2 ± 0.1	264				II		f
588	vinyl ferrocenyl ketone	AIBN/benzene/70°C	0.28	0.31	265	0.295 ± 0.040	0.429 ± 0.147	0.047	I(I)	0.538	

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
589	2-vinyl-heptamethyl trisilan	AIBN/benzene/60°C	38 ± 5	0	266				III		
590	N-vinylglycidylurethane	AIBN/THF/60°C	10.4 ± 0.02	0.02 ±0.02	135	11.73 ± 2.38	0.065 ± 0.154	0.478	I(!)	0.081	
591	2-vinyl-4-hydroxymethyl-1,3-dioxolane	AIBN/-/60°C	20.4	0.03	259	20.12 ± 1.34	0.0224± 0.0630	0.187	I	0.024	e
592	vinylidene chloride	?/bulk/50°C	2.1 ± 0.2	0.145 ± 0.009	267	1.799 ± 0.420	0.0445 ± 0.1330	0.698	I(!)	0.073	f
593	1-vinyl imidazole	AIBN/bulk/60°C	10.0 ± 0.2 9.8	0.10 ± 0.02 0.06	193	9.995 ± 1.038	0.081 ± 0.052	0.067	I	0.203	e y
594	vinyl iodide	AIBN/benzene, $Na_2S_2O_3$/60°C	7.0 ± 0.2	0.145 ± 0.01	268	7.401 ± 0.315	0.126 ± 0.035	0.012	I	0.130	
595	vinyl l-menthyl ether	AIBN/benzene/60°C	27.5	0.01	269				III		
596	vinyl mercapto benzimidazole	AIBN/bulk/60°C	4.1	0.20	270	6.507 ± 1.504	0.620 ± 0.587	0.226	I(!)	0.228	
597	vinyl mercapto benzoxazole	AIBN/bulk/60°C	2.61 ± 0.13	0.274 ± 0.032	270	2.883 ± 0.535	0.245 ± 0.153	0.116	I	0.366	
598	vinyl mercapto benzthiazole	AIBN/bulk/60°C	2.12 ± 0.09	0.336 ± 0.028	270	2.170 ± 0.200	0.348 ± 0.102	0.027	I	0.302	
599	vinyl mercapto 4-methylthiazole	AIBN/bulk/60°C	2.4	0.34	271	2.441 ± 0.260	0.348 ± 0.111	0.034	I	0.350	
600	4-vinyl-2'-methoxybenzophenone	AIBN/benzene/60°C	0.28 ± 0.02	1.63 ± 0.34	255	0.226 ± 0.069	1.521 ± 0.583	0.109	I(!)	0.833	
601	4-vinyl-4'-methoxybenzophenone	AIBN/benzene/60°C	0.38 ± 0.05	1.63 ± 0.26	255	0.423 ± 0.071	1.85 ± 0.93	0.084	I	0.269	
602	5-vinyl-2-methyl-O,O'-bis(1'-ethoxyethyl) hydroquinone	AIBN/benzene/60°C	0.83	0.18	272	0.859 ± 0.078	0.189 ± 0.119	0.057	I	0.165	
603	vinyl methyl diacetoxysilane	AIBN/toluene/60°C	4.01 ± 0.03	0	273	(4.07 ± 0.45 4.129	-0.04 ± 0.26) 0		I(!)		p
604	vinyl methyl diethoxysilane	AIBN/bulk/60°C	11.7 ± 0.01	0	273				III		
605	vinyl methyl diethoxysilane	AIBN/toluene/60°C	5.7 ± 0.02	0.13 ± 0.06	273	5.693 ± 0.486	0.071 ± 0.389	0.465	I(!)	0.016	
606	N-vinyl-N-methyl-S-ethylmonothiocarbamate	AIBN/-/66°C	13.0 ± 3	0.025 ± 0.01	254				III		
607	3-(2-vinyl)-6-methylpyridazinone	AIBN/DMF/60°C	0.9	0.9	274	0.814 ± 0.137	0.837 ± 0.138	0.028	I	0.956	
608	5-vinyl-2-methylpyridine	AIBN/-/60°C	0.812 ± 0.005	0.01 ± 0.02	275	0.790 ± 0.047	0.873 ± 0.068	0.005	I	0.719	
609	2-vinylnaphtalene	BPO/-/60°C	0.5 ± 0.1	1.4 ± 0.1	249	0.395 ± 0.049	1.345 ± 0.093	0.009	I	0.596	
610	vinyl pentachlorophenylsulphoxide	AIBN/-/80°C	3.9	0.08	276	3.705 ± 0.366	0.107 ± 0.055	0.051	I	0.200	
611	vinyl pentamethyl disilane	AIBN/benzene/60°C	50 ± 10	0	266				III		
612	1-p-vinylphenyl-3-chloromethyldisiloxane	AIBN/toluene/80°C	1.01 ± 0.08	1.08 ± 0.16	277	0.940 ± 0.607	1.018 ± 3.975	2.523	I(!)	0.198	
613	1-p-vinylphenyl-5-chloromethyltrisiloxane	AIBN/toluene/80°C	1.02 ± 0.04	0.97 ± 0.10	277	0.901 ± 0.236	0.603 ± 1.616	0.703	I(!)	0.098	
614	1-p-vinylphenyl-7-chloromethyltetrasiloxane	AIBN/toluene/80°C	0.98 ± 0.04	1.08 ± 0.08	277				III		

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
615	4-vinylphenyl dimethyl chloromethyl silane	AIBN/toluene/80°C	0.69 ± 0.03	0.86 ± 0.03	277	0.664 ± 0.041	0.868 ± 0.085	0.006	I	0.771	
616	4-vinylphenyl dimethyl silane	AIBN/toluene/80°C	0.56 ± 0.01	1.00 ± 0.01	278	0.527 ± 0.228	1.043 ± 0.887	0.367	I(I)	0.439	
617	4-vinylphenyl dimethyl phenyl silane	AIBN/toluene/80°C	0.80 ± 0.16	2.3 ± 0.4	278	0.764 ± 0.453	2.022 ± 2.457	0.721	I(I)	0.455	
618	vinyl phenyl ketone	AIBN/-/60°C	0.11	1.1 ± 0.1	279	0.125 ± 0.053	0.931 ± 0.206	0.095	I(I)	0.432	
619	vinyl phenyl ketone	AIBN/-/60°C	0.21	0.48	60	0.193 ± 0.063	0.470 ± 0.086	0.600	I	0.557	
620	4-vinylphenyl methyl silane	AIBN/-/60°C	0.91	1.1	297	0.892 ± 0.184	1.161 ± 0.641	0.114	I	0.305	
621	vinyl (α-phenyl) phosphonic acid	AIBN/dioxane/70°C	-	-	280				III		
622	vinyl phenyl silane	AIBN/-/60°C	5.7	0	297				III		
623	4-vinylphenyl siloxane	AIBN/toluene/80°C	1.04 ± 0.06	1.2 ± 0.4	281	1.018 ± 2.965	1.215 ± 21.91	52.49	I(I)	0.160	
624	4-vinylphenyl disiloxane	AIBN/toluene/80°C	0.90 ± 0.03	1.2 ± 0.2	281	0.905 ± 1.101	1.268 ± 16.28	15.62	I(I)	0.093	
625	4-vinylphenyl trisiloxane	AIBN/toluene/80°C	1.15 ± 0.05	1.1 ± 0.3	281	1.204 ± 1.833	1.246 ± 20.76	25.37	I(I)	0.090	
626	4-vinylphenyl tetrasiloxane	AIBN/toluene/80°C	1.11 ± 0.01	1.2 ± 0.1	281	1.137 ± 0.510	1.228 ± 6.088	2.222	I(I)	0.0872	
627	N-vinyl phtalimide	BPO/DMF/60°C	6.3	0.09	282	6.234 ± 1.506	0.0601 ± 0.1478	0.594	I	0.096	
628	N-vinyl phtalimide	-/-/65°C	8.3 ± 0.3	0.075 ± 0.03	283	8.37 ± 0.30	0.0792 ± 0.0277	0.012	I	0.082	
629	2-vinylpyridine	AIBN/-/60°C	0.56 ± 0.02	0.9 ± 0.2	262	0.454 ± 0.314	0.745 ± 0.360	0.335	I(I)	0.643	
630	4-vinylpyridine	AIBN/-/60°C	0.54 ± 0.03	0.7 ± 0.1	262	0.509 ± 0.165	0.688 ± 0.182	0.086	I	0.665	
631	2-vinylpyridine-N-oxide	AIBN/ethanol/60°C	0.11 ± 0.01	2.1 ± 0.6	263				II		
632	N-vinyl pyrrolidone	AIBN/benzene/60°C	6.5 ± 0.2	0.012 ± 0.003	247				III		n
633	N-vinyl pyrrolidone	AIBN/bulk/60°C	24.17	0.082	284	20.507 ± 5.129	0.0299 ± 0.1506	1.258	I(I)	0.051	
634	N-vinylsuccinimide	BPO/-/60°C	7.0	0.09	257	5.314 ± 1.972	0.004 ± 0.128	12.45	I(I)	0.015	
635	N-vinylsuccinimide	BPO/bulk/60°C	10.5	0.07	285	10.83 ± 1.47	0.031 ± 0.047	0.203	I	0.094	
636	vinyl sulphonyl (β-chloroethyl)amide	AIBN/-/62°C	3.0	0.075	286				II		
637	N-vinylthiopyrrolidone	AIBN/benzene/60-65°C	1.75 ± 0.05	0.45 ± 0.03	287	1.811 ± 0.119	0.480 ± 0.049	0.007	I	0.525	e,f
638	vinyl p-tolyl sulphoxide	AIBN/-/70°C	5.77 ± 0.10	0.10 ± 0.07	288	5.522 ± 0.941	0.0201 ± 0.1454	1.233	I	0.020	
639	vinyl triacetoxysilane	BPO/-/60°C	3.85 ± 0.1	0	289				II		
640	vinyl triacetoxysilane	BPO/-/80°C	3.88	0	289				II		
641	vinyl triacetoxysilane	BPO/-/100°C	1.9 ± 0.1	0	289				II		
642	vinyl tri-n-butyltin	AIBN/benzene/50°C	16.0	0.005	290				III		

No.	2nd Monomer	Initiator / Solvent / Temp. °C	Original r_1	Original r_2	Ref.-No.	Recalculated r_1	Recalculated r_2	$\delta^{\square}$	Class	Q	Remarks
643	vinyl triethoxysilane	BPO/-/80°C	13 ± 1	0	289				II		
644	p-vinyl trifluoroacetophenone	AIBN/benzene/60°C	0.30 ± 0.09	1.3 ± 0.3	291	0.216 ± 0.079	1.108 ± 0.558	0.183	I(I)	0.754	
645	vinyl trimethyl germane	AIBN/benzene/50°C	24.4	0.009	292	(22.22 ± 2.78 24.06	-0.099 ± 0.095) 0		I(I)		e p
646	vinyl trimethyl silane	-/-/25°C	-	-	293				III		
647	N-vinyl-4-trimethylsilyl-phtalimide	AIBN/benzene/60°C	6.1	0.08	294	(4.675 ± 1.312 4.928	-0.083 ± 0.218) 0		I(I)		e p
648	vinyl trimethyltin	AIBN/benzene/50°C	44.8	0.001	290				II		
649	4-vinyl triphenyl carbinol	AIBN/benzene/50°C	0.47 ± 0.1	1.60 ± 0.15	243	0.410 ± 0.181	1.521 ± 0.447	0.130	I	0.789	

Remarks to Table 1

[a] Badly scattered data points.
[b] Data from high-conversion experiments.
[d] One of the data points was omitted because of the high conversion.
[e] Original parameter values by Finemann and Ross (FR).
[f] Original parameter values by Mayo and Lewis (ML).
[h] Original parameter values by non linear least-square fit (NLLS).
[m] According to the original article, the system is subject to penultimate effect, r-values are not given.
[n] Systematic deviations are possible.
[o] Numbering of monomers possibly reversed.
[p] $r_2 = 0$ has been supposed.
[q] $r_1 = 0$ has been supposed.
[r] Systematic analytical error is possible.
[s] Concentration range too small.
[t] Three data points only.
[u] Two data points only.
[x] Inhibition rather than copolymerization.
[y] Original parameter values by KT, small conversion.
[z] Systematic deviation in the analysis.

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