

Supplementary Information Tables to:

Ecotoxicological assessment of nanoparticle-containing acrylic copolymer dispersions in fairy shrimp and zebrafish embryos

Table SI-1: Technical characterisation of the nanoparticle-containing acrylic copolymer dispersions

Property	Units	110 nm-ACP	ACP-2	AAECP	SACP	PPE
Type of polymer		Aqueous dispersion of a styrene	Aqueous dispersion of a styrene	Anionic acrylic ester copolymer dispersion containing free carboxyl groups	Aqueous dispersion of a straight acrylic copolymer	Aqueous dispersion of a polyester-polyurethane elastomer
Solids content	% (approx.)	50	50	60	41	40
Relative contents < 100 nm (AUC)	Weight %	10	<1	11 (bimodal)	100	>80
Particle size / dispersibility (H ₂ O) (AUC)	D ₅₀ (nm)	107	119	79 (for the mode < 100 nm)	52	85
TG / MFT	° C	MFT: approx. 20; TG: 15.4	MFT: approx. 22	TG: -45	MFT: approx. < 3	TG: -46
pH value	without unit	7.5-9	6.5-8.5	6.0-8.0	7.5-8.5	7.0-9.0
Viscosity	mPa*S	700-1500 ^a	300-1000 ^a	30-150 ^a	50-200 ^a	approx. 40 ^b

Footnote to Table SI-1:

Abbreviations: AUC: Analytical ultracentrifugation; MFT: Minimum film forming temperature; TG: Glass temperature.

a: DIN EN ISO 3219

b: DIN EN ISO 3219, Appendix A

Table SI-2: Dissolved oxygen (A) and pH values (B) recorded for the negative control and the test substance preparations in the acute aquatic toxicity tests

A Dissolved oxygen	Negative control	1000 mg/L	2500 mg/L
80 nm-ACP	95%	98%	100%
110 nm-ACP	94%	100%	100%

B pH values	Negative control	1000 mg/L	2500 mg/L
80 nm-ACP	7.6	7.4	7.2
110 nm-ACP	7.4	7.1	7.3

Footnote to Table SI-2:

Negative control: Standardised dilution water.