COATINGS

INDORAMA VENTURES

ULTRAFILM® 2770

A low odor and effective coalescing agent for emulsion polymer systems

COATINGS

INDORAMA VENTURES

ULTRAFILM® 2770 is a low VOC, cost effective, coalescing agent. The product has a broad compatibility with different types of emulsion polymers and can be easily incorporated even at high temperatures. Due its high efficiency, a lower demand in relation to other coalescents can be used for achieving the target MFFT.

COATINGS

INDORAMA VENTURES

BENEFITS

- Odorless in relation to TMIB
- Compatible with different emulsion polymers (Vinyl-Acrylic, Pure Acrylic and Styrene-Acrylic)
- Ease for incorporation on paints and emulsion polymers. The product can be incorporated on emulsion polymers at high temperatures
- High efficiency for reducing the MFFT of different emulsion polymers – lower demand in relation to TMIB
- Easy for replacing TMIB, with no significant formulation adjustments
- Excellent performance on final paints properties

FEATURES

- Low viscosity clear liquid
- Boiling point = 277°C
- High efficiency for reducing MFFT

TMIB: 2,2,4-trimethyl-1,3- pentanediol monoisobutyrate

COATINGS

INDORAMA VENTURES

PERFORMANCE TESTS

Broad latex compatibility

Simulated Hansen Solubility Parameters and compatibility evaluation comparison between ULTRAFILM® 2770 and TMIB

Product	δD	δP	δH	RED – Pure Acrylic Latex	RED – Vinyl Acrylic Latex	RED – Styrene Acrylic Latex
ULTRAFILM® 2770	17.8	5.5	6.8	1.30	0.44	0.40
TMIB	15.1	6.1	9.8	1.33	0.48	0.89

Due to its chemical composition, **ULTRAFILM® 2770** is highly compatible with different emulsion polymers and can be easily incorporated in the paint formulation or in the emulsion polymer at room or high temperatures.

COATINGS

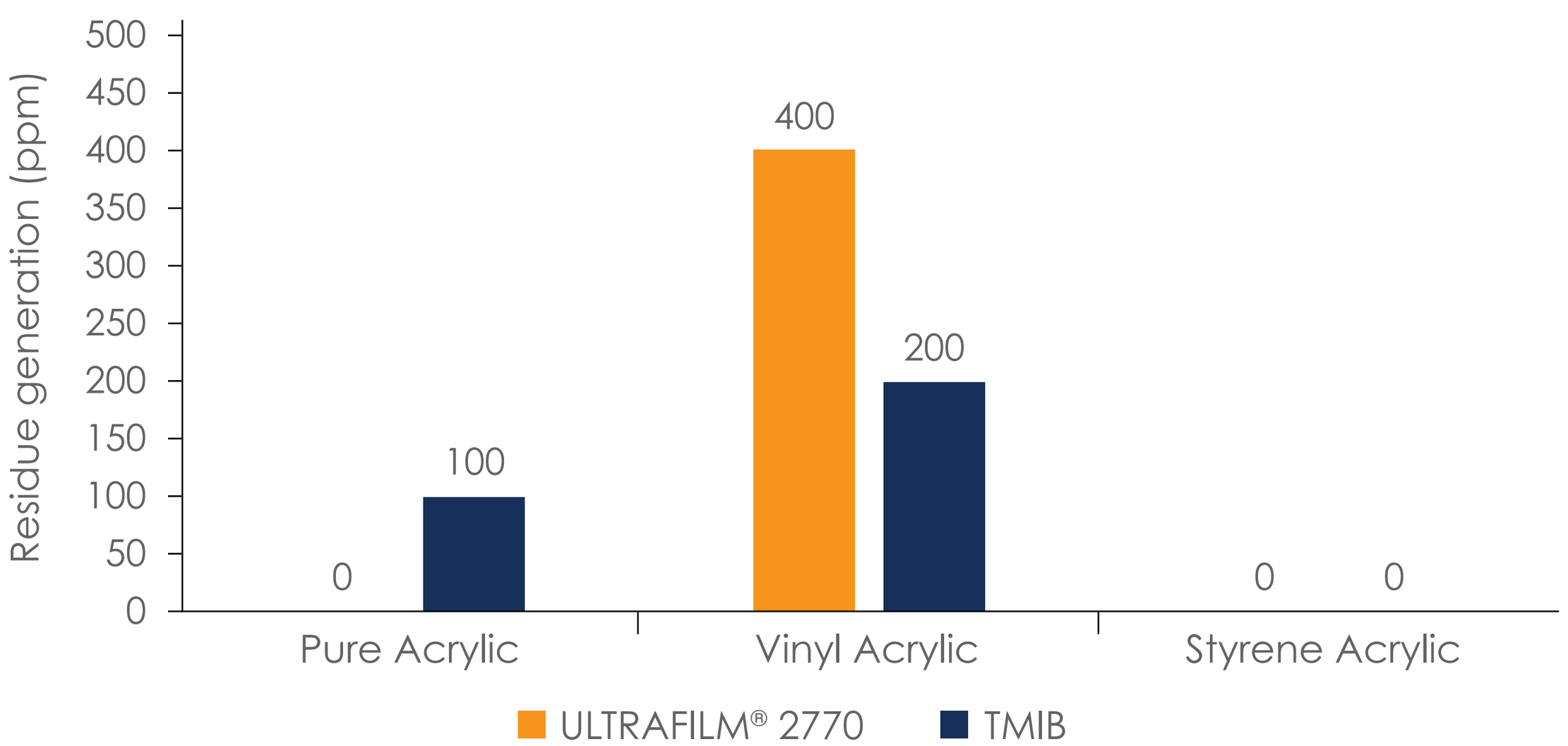
INDORAMA VENTURES

PERFORMANCE TESTS

Broad latex compatibility

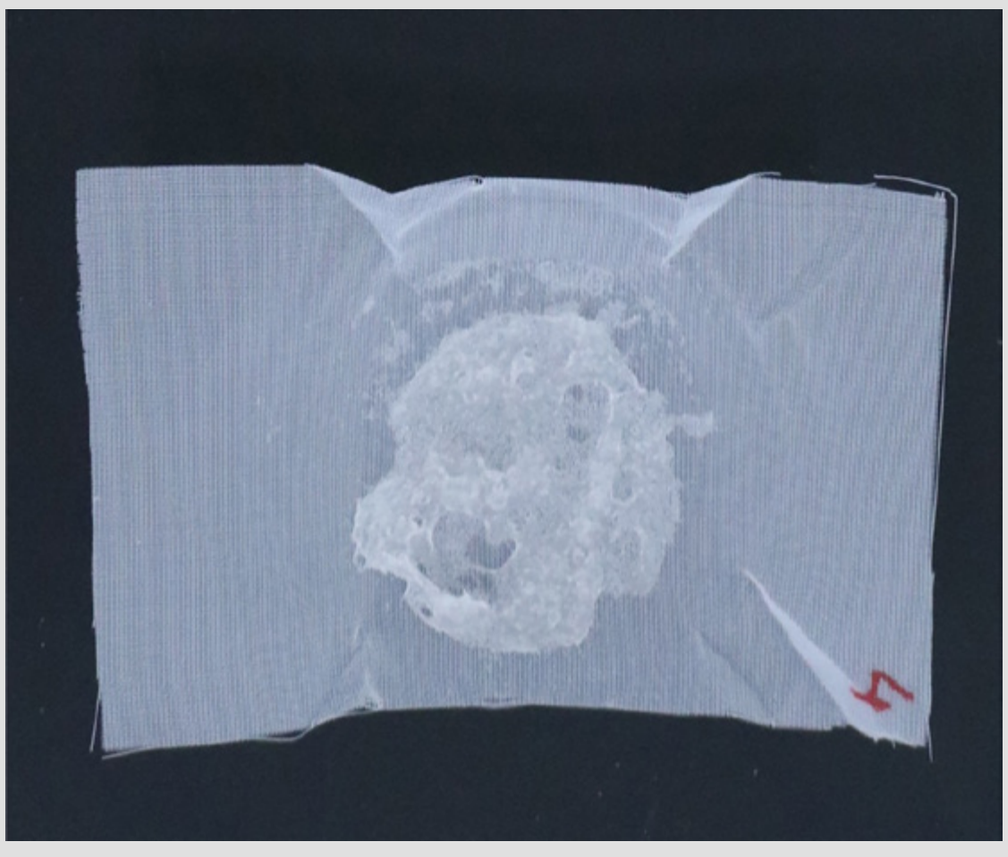
Process incorporation in different latexes at 50°C

Residue generation during incorporation @50°C



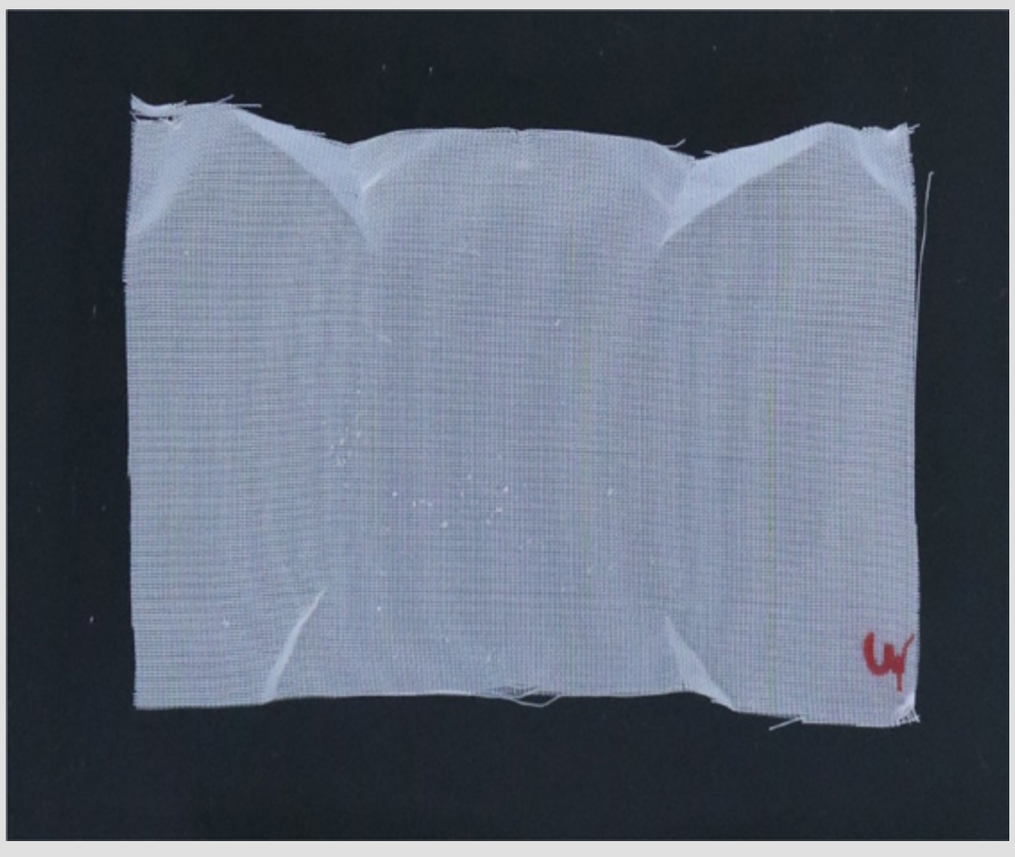
Vinyl Acrylic emulsion polymer

Coalescing agent with poor compatibility



Poor compatibility; residue generation = 13200 ppm

ULTRAFILM® 2770



Excellent compatibility; residue generation = 400 ppm

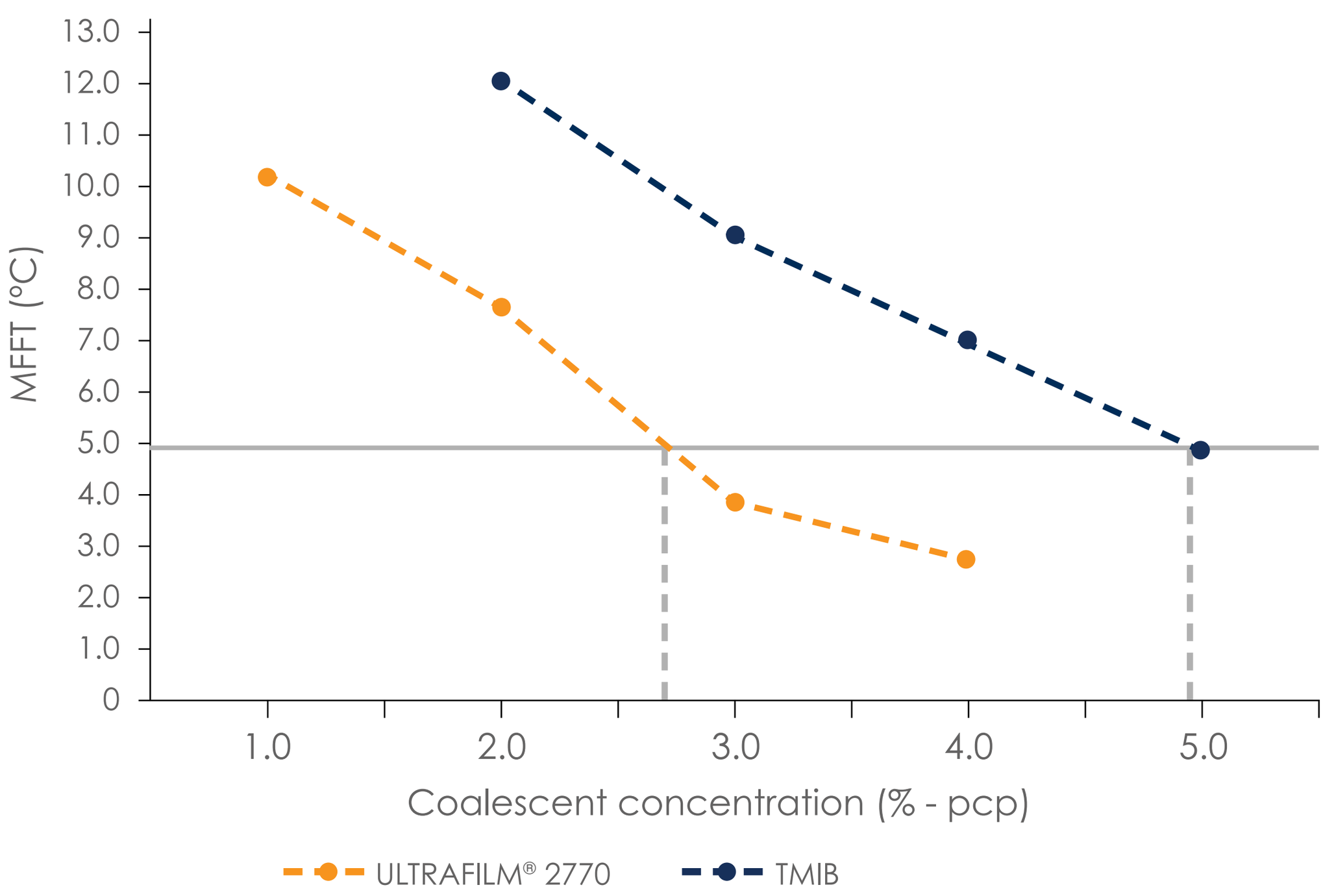
COATINGS

INDORAMA VENTURES

PERFORMANCE TESTS

Low dosage use

PURE ACRYLIC LATEX, Tg~29°C, MFFT~20°C



Possible dosage reduction up to 40% in relation to TMIB for pure acrylic emulsion polymers.

Due to its compatibility and ease for incorporation, **ULTRAFILM® 2770** is highly effective for reducing the minimum film formation temperature (MFFT) of different emulsion polymers.

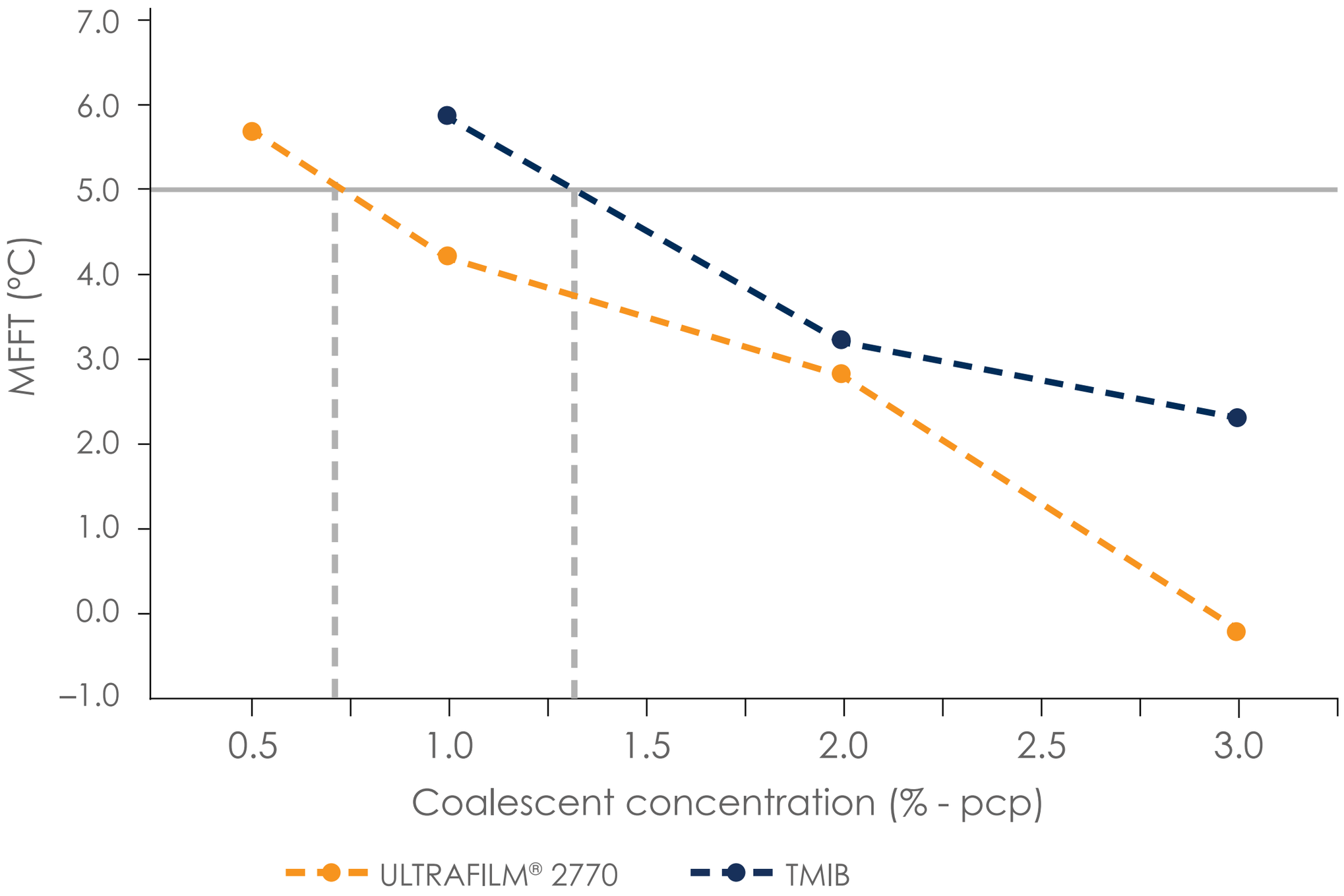
COATINGS

INDORAMA VENTURES

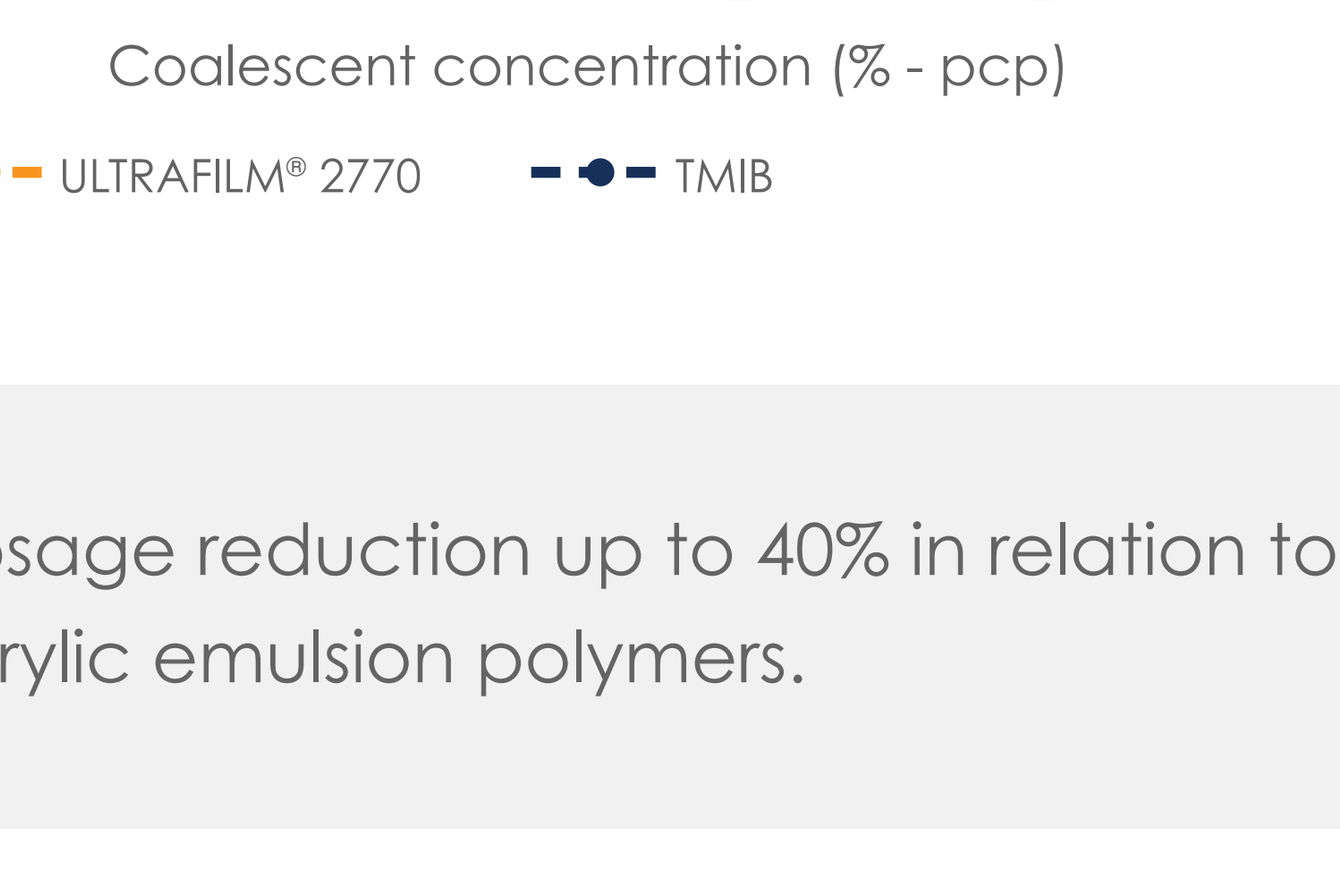
PERFORMANCE TESTS

Low dosage use

VINYL ACRYLIC LATEX, Tg~17°C, MFFT~12°C



Possible dosage reduction up to 40% in relation to TMIB for vinyl acrylic emulsion polymers.



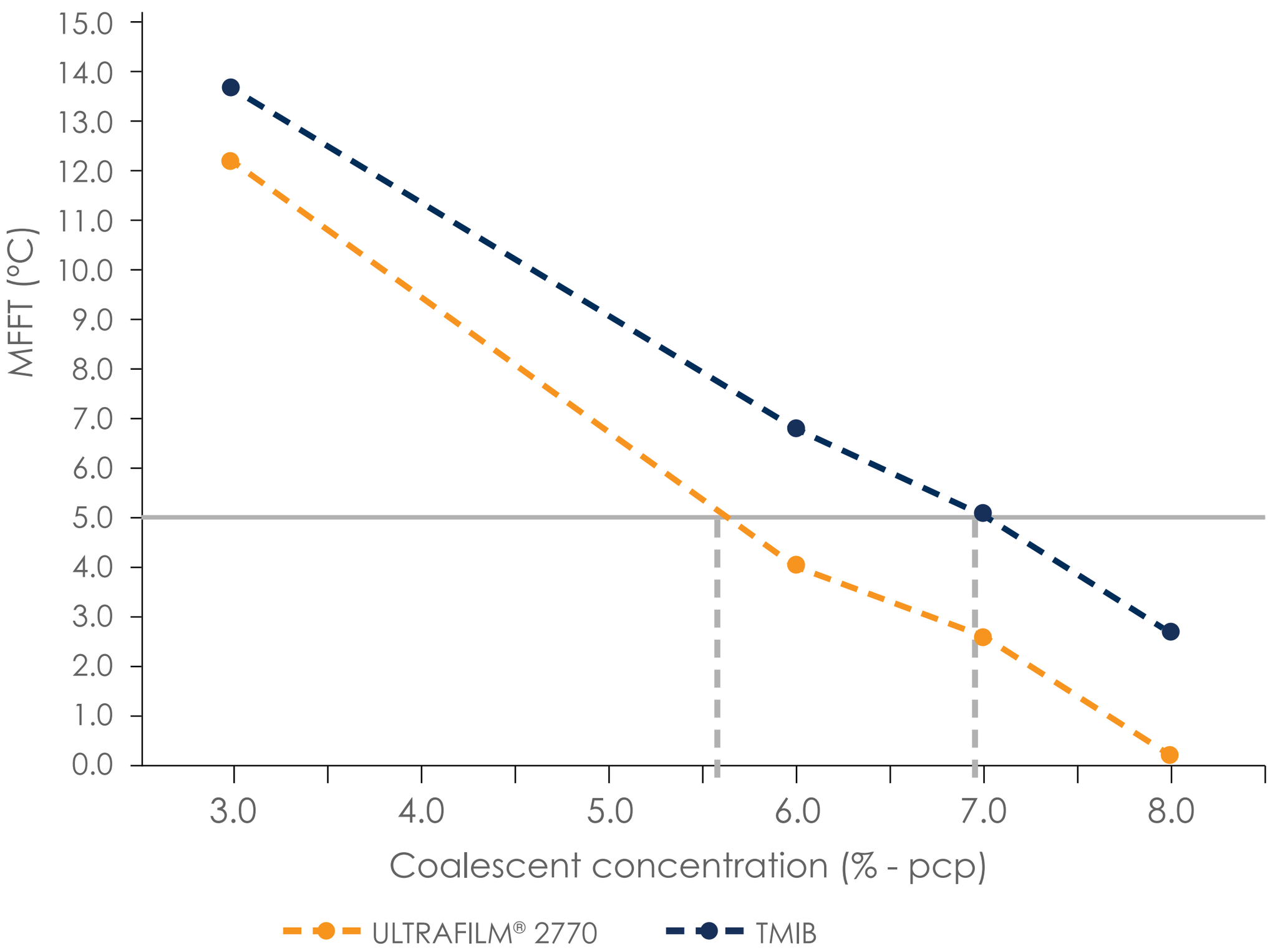
COATINGS

INDORAMA VENTURES

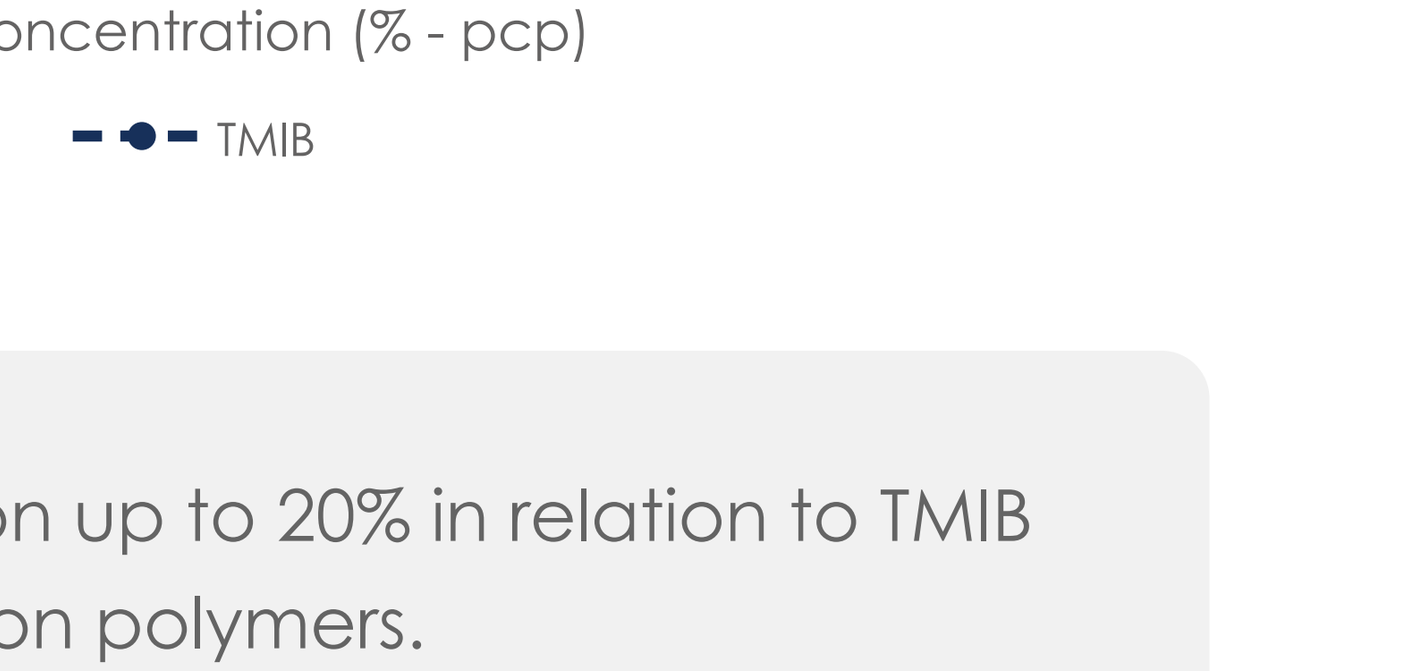
PERFORMANCE TESTS

Low dosage use

STYRENE ACRYLIC LATEX, Tg~30°C, MFFT~22°C



Possible dosage reduction up to 20% in relation to TMIB for styrene acrylic emulsion polymers.



COATINGS

INDORAMA VENTURES

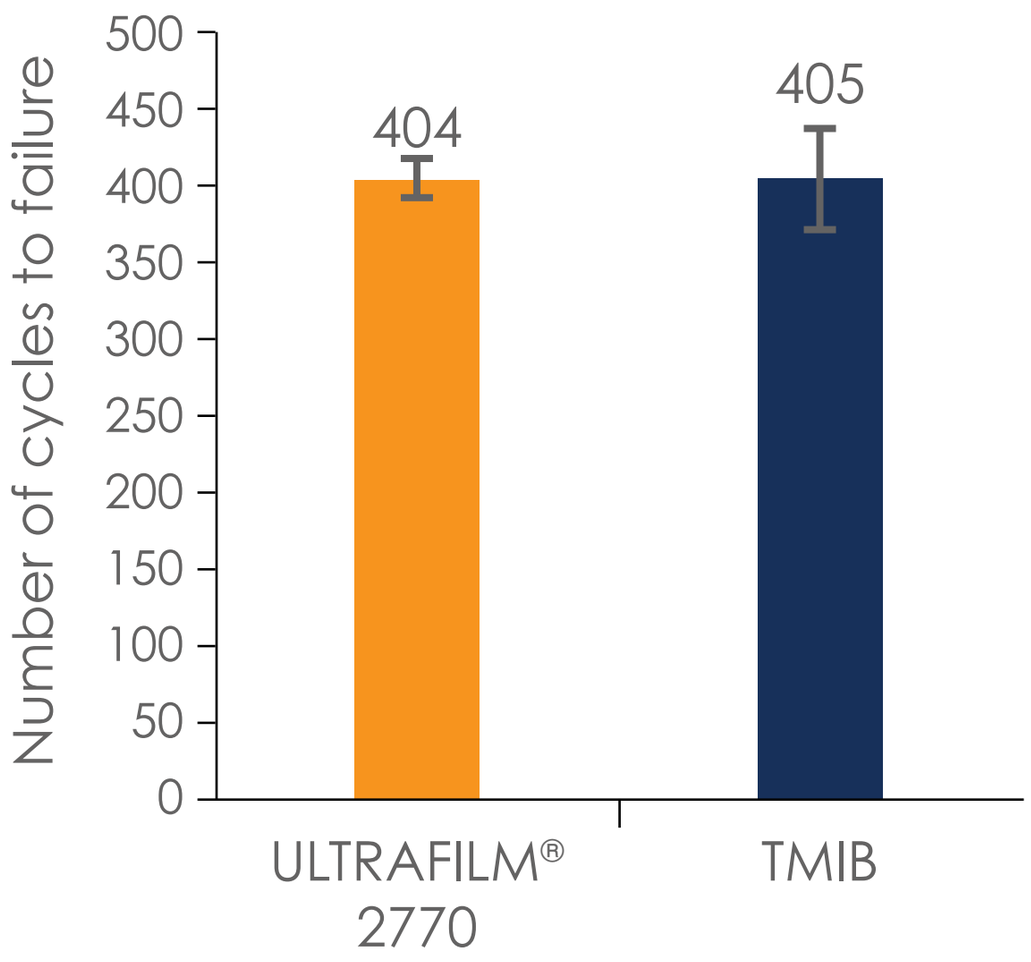
PERFORMANCE TESTS

Paint performance

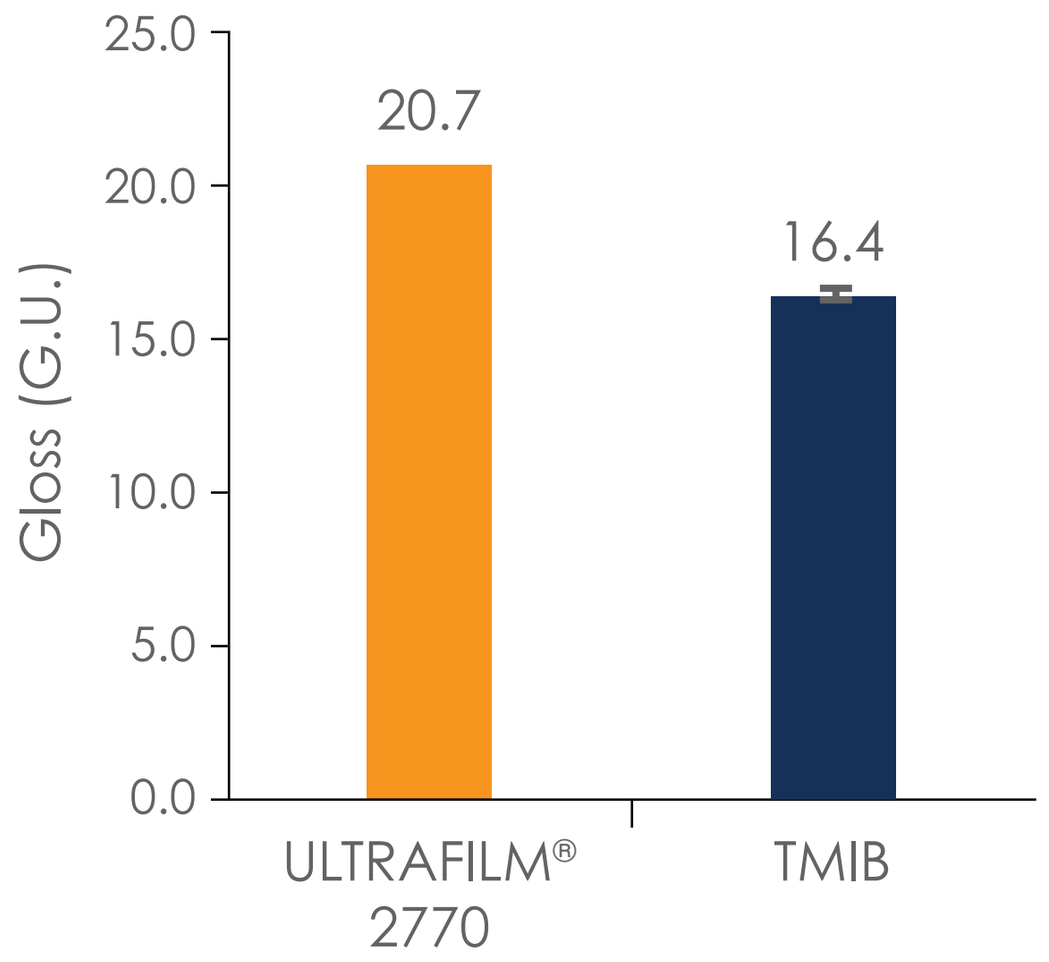
Evaluation on an acrylic semigloss paint

Formulation	05LBR – Acrylic Semigloss
Emulsion polymer	Pure Acrylic, Tg~29°C, MFFT~20°C
Emulsion polymer content	35%
PVC	32%
Coalescent content	0.86% (5.0 PCP)

Wet scrub resistance - ASTM D2486-17 - Method A



Gloss @60°



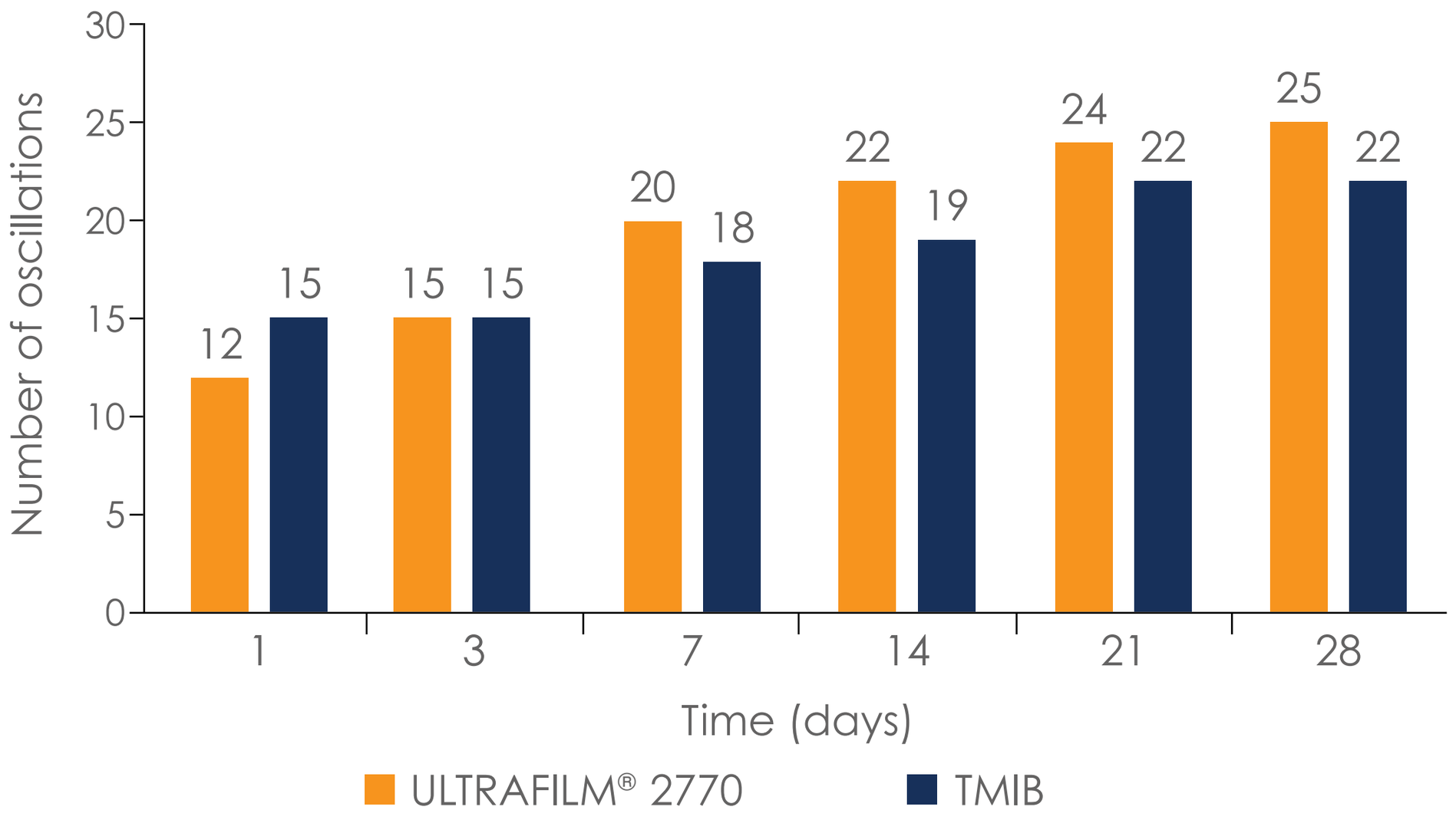
COATINGS

INDORAMA VENTURES

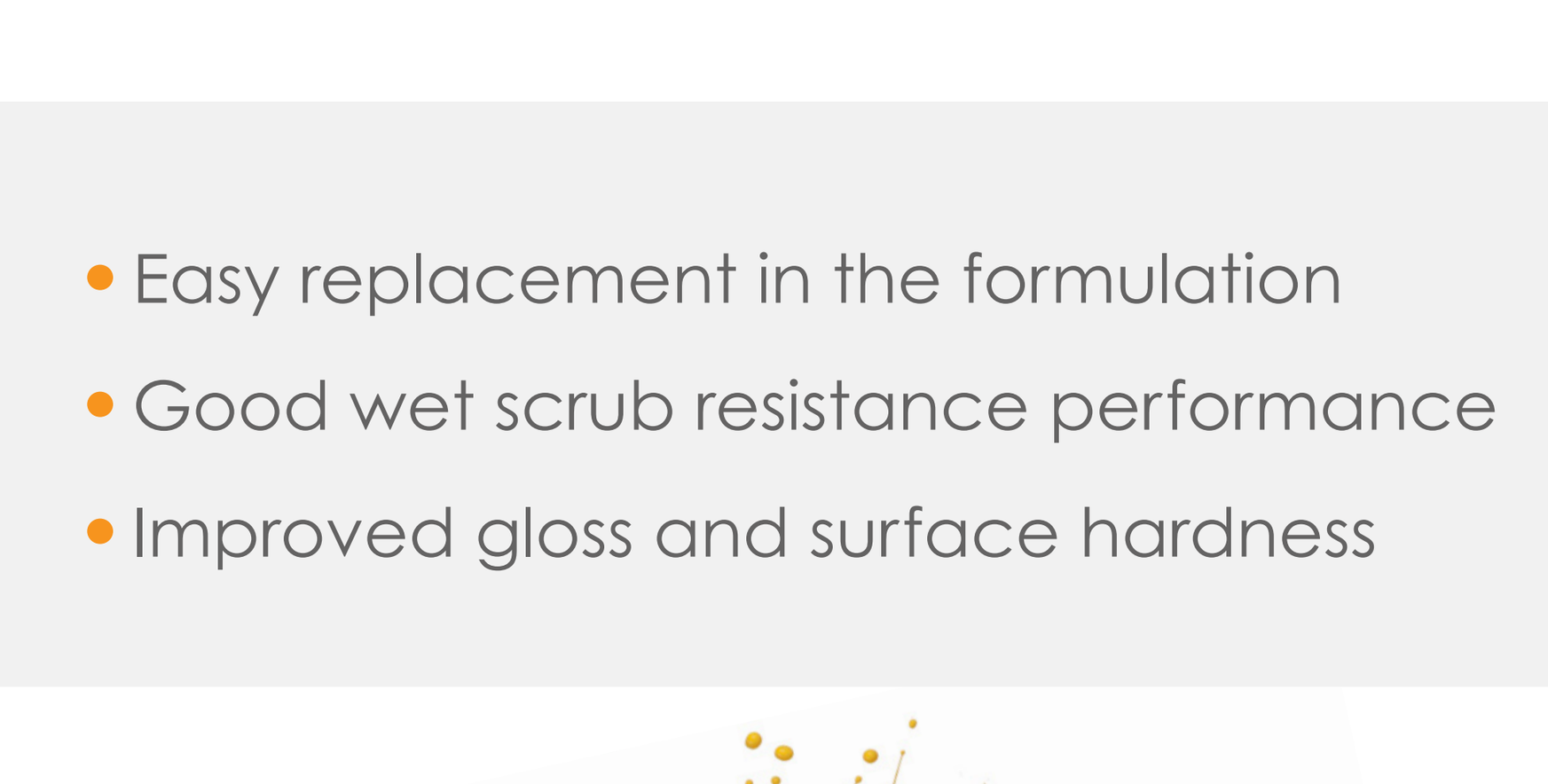
PERFORMANCE TESTS

Paint performance

König Hardness evolution



- Easy replacement in the formulation
- Good wet scrub resistance performance
- Improved gloss and surface hardness



COATINGS

INDORAMA VENTURES

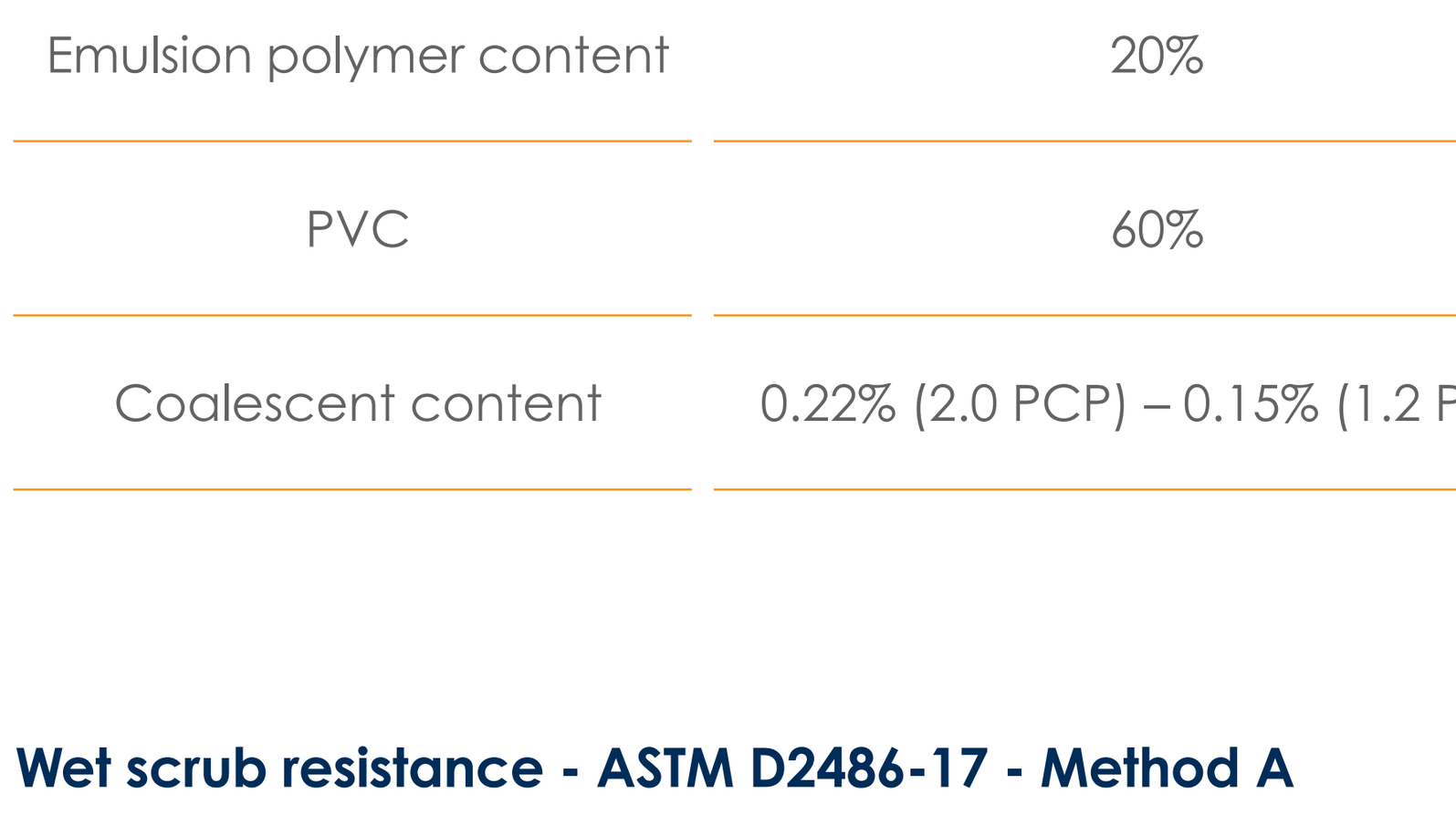
PERFORMANCE TESTS

Paint performance

Evaluation on a vinyl acrylic flat paint

Formulation	Interior Vinyl Acrylic Flat Paint
Emulsion polymer	Vinyl Acrylic, Tg~17°C, MFFT~12°C
Emulsion polymer content	20%
PVC	60%
Coalescent content	0.22% (2.0 PCP) – 0.15% (1.2 PCP)

Wet scrub resistance - ASTM D2486-17 - Method A



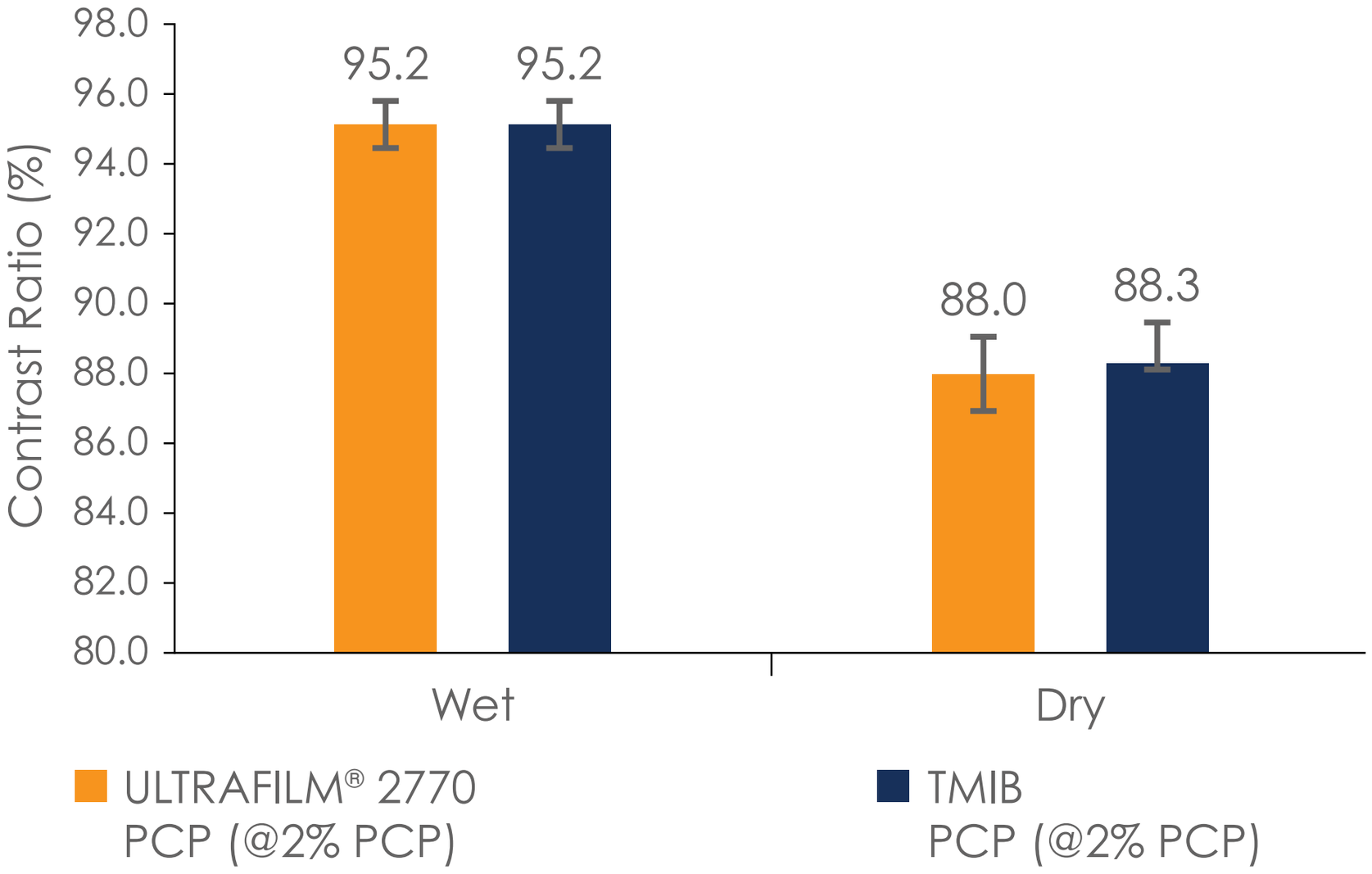
COATINGS

INDORAMA VENTURES

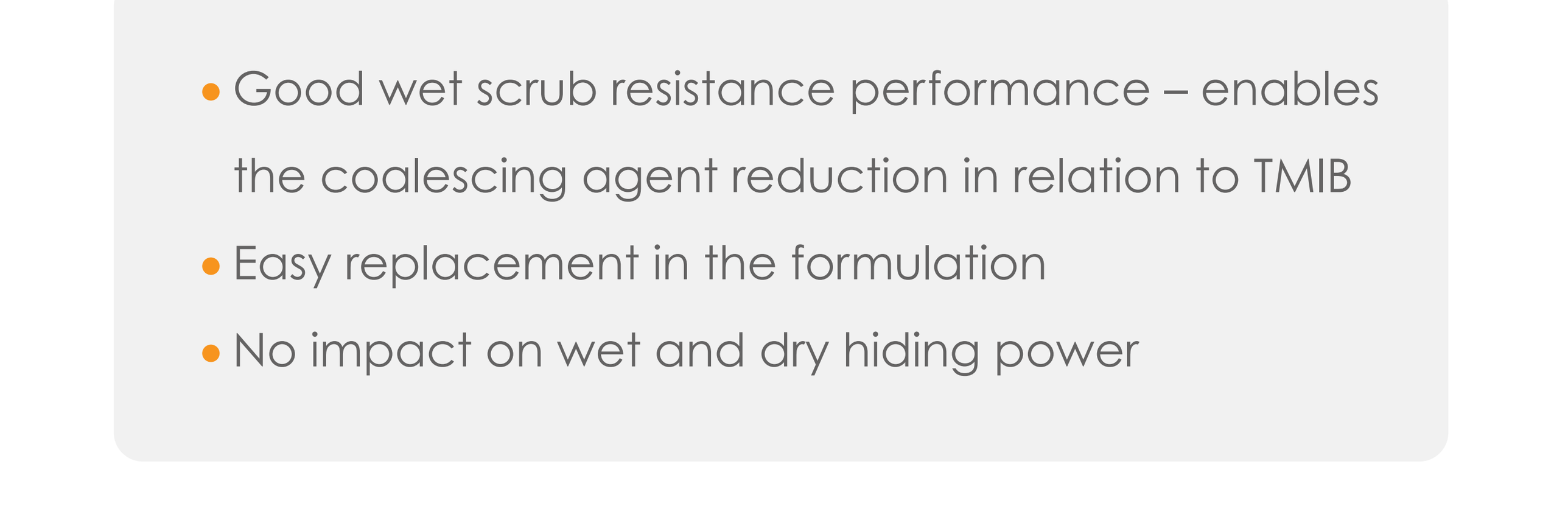
PERFORMANCE TESTS

Paint performance

Wet and Dry Hiding Power



- Good wet scrub resistance performance – enables the coalescing agent reduction in relation to TMIB
- Easy replacement in the formulation
- No impact on wet and dry hiding power



COATINGS

INDORAMA VENTURES

PERFORMANCE TESTS

Paint performance

Evaluation on a styrene acrylic flat paint

Formulation	01LBR – Styrene Acrylic Flat Paint
Emulsion polymer	Styrene Acrylic, Tg~30°C, MFFT~22°C
Emulsion polymer content	8%
PVC	87%
Coalescent content	0.32% (8.0 PCP)

Formulation	03LBR – Styrene Acrylic Flat Paint
Emulsion polymer	Styrene Acrylic, Tg~30°C, MFFT~22°C
Emulsion polymer content	25%
PVC	54%
Coalescent content	1.11% (8.9 PCP)

- Improved wet scrub resistance performance, specially on high PVC styrene acrylic systems
- Easy replacement in the formulation

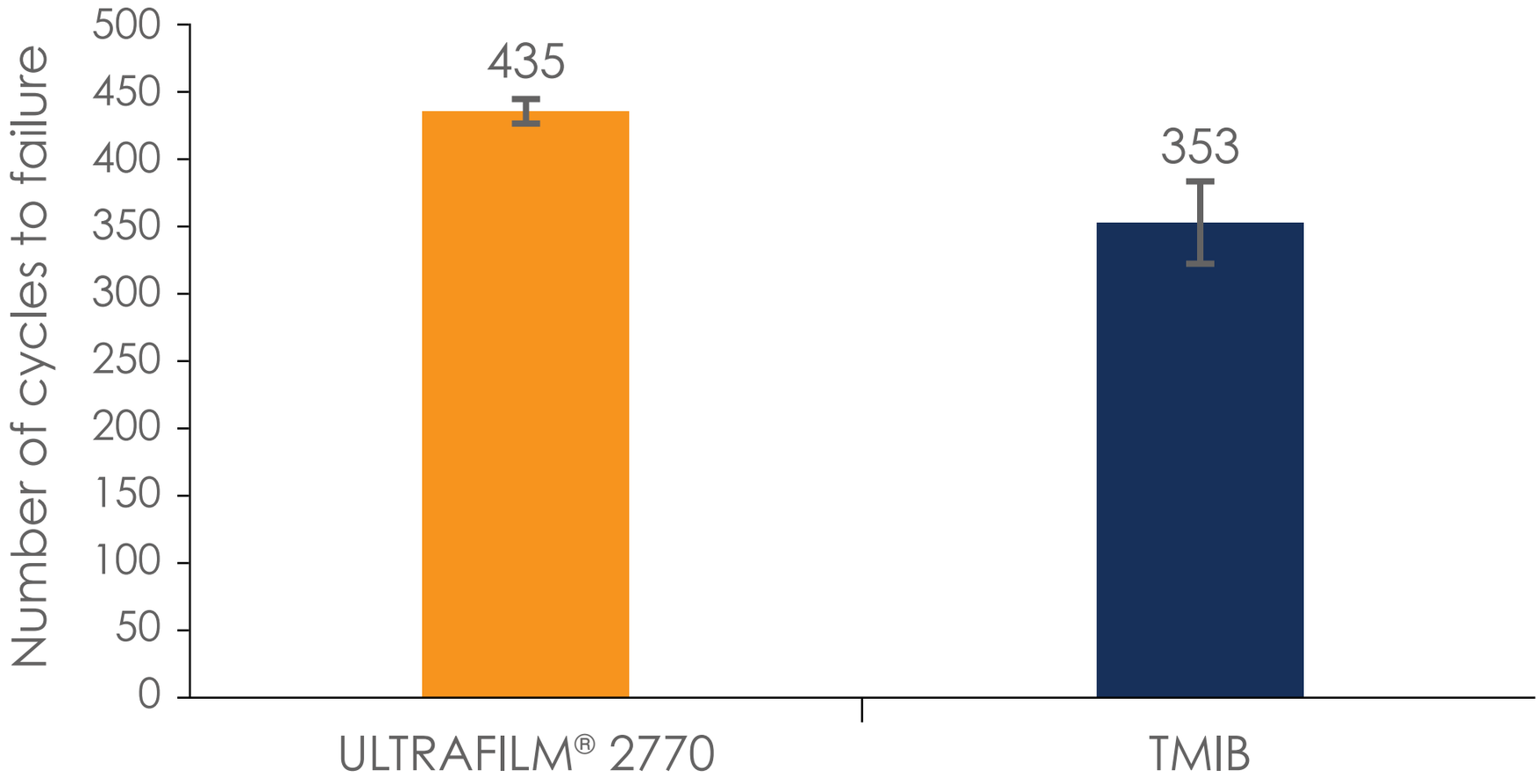
COATINGS

INDORAMA VENTURES

PERFORMANCE TESTS

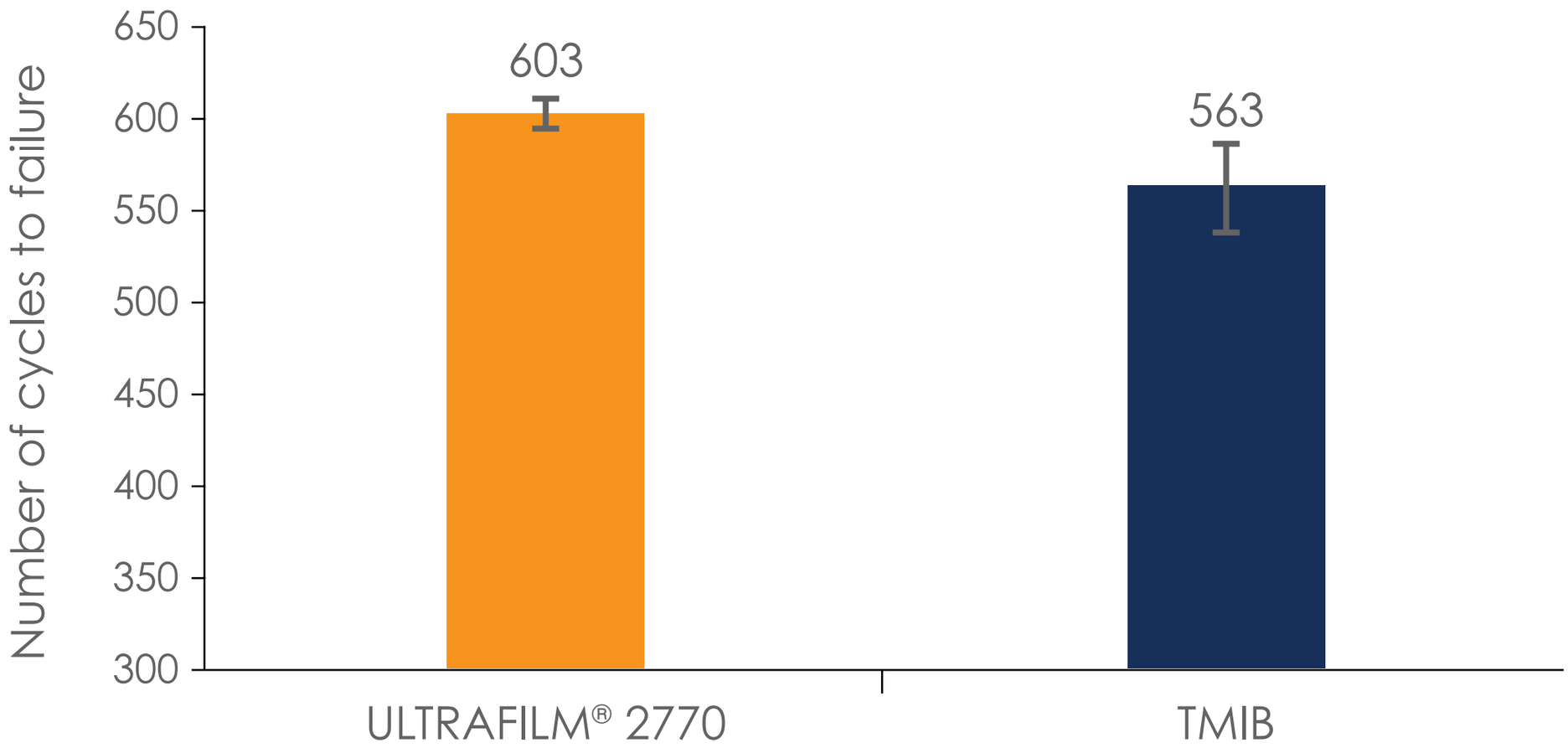
Paint performance

Wet scrub resistance - ABNT NBR 15378



01LBR – Styrene Acrylic Flat Paint

Wet scrub resistance - ASTM D2486-17 – Method A



03LBR – Styrene Acrylic Flat Paint

If you are looking for dosage efficiency, **ULTRAFILM® 2770** is what you need!

Contact us and request a sample.

INDORAMA VENTURES

iod.indoramaventures.com