

Custom Stress Toys — Material Comparison Guide

PU foam · TPR gel · silicone · neoprene — feel, density & durability side by side

We are a direct stress-toy factory in China. Every order is Pantone-matched, printed with a material-matched ink system, and squeeze-cycle tested — your logo stays clear past 5,000 squeezes, permanent deformation stays under 5%, and batch rework stays below 3%.

500

MOQ / SKU

7-Day

PROTOTYPES

10+

YEARS
MANUFACTURING

300+

GLOBAL BRANDS

LeelineToys — Direct Toy Manufacturing Partner

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1 Material Comparison Table

Four core formulations — custom density, texture, and additives on request

MATERIAL	FEEL	BEST FOR	DENSITY	DURABILITY
PU Foam The Classic Squeeze	Soft, slow-rebound	Promotional giveaways, trade shows, general stress relief	60–120 kg/m³	10,000+ cycles
TPR Gel Clear & Smooth	Smooth, cool-touch, glossy	Premium DTC products, sensory toys, clear designs	0.9–1.2 g/cm³	15,000+ cycles
Silicone Premium Soft-Touch	Ultra-soft, velvety surface	Premium corporate gifts, luxury branding, baby-safe	1.1–1.3 g/cm³	20,000+ cycles
Neoprene Firm Resistance	Firm, high-resistance rebound	Fitness grip trainers, rehabilitation, hand strength	120–200 kg/m³	25,000+ cycles

All formulations are EN71, ASTM F963 & CPSIA tested, with third-party test reports shipped with every order. Custom scents, glitter, metallic finishes, and color-change effects available on 15+ in-stock formulations.

2 How Your Logo Survives 5,000+ Squeezes

Our print process — built to be part of the surface, not on top of it

1 Surface pre-treatment

Degrease and corona-treat silicone/TPR to open surface pores so ink bites into the material instead of sitting on top of it.

2 Adhesion primer coat

A material-matched primer layer. On silicone we use a silicone-compatible base that chemically bonds to the substrate.

3 Ink system matched to material

Flexible 2K PU inks for foam, silicone-compatible inks for TPR. We never substitute a rigid ink as a shortcut.

4 Multi-pass print + UV curing

Logos are built in thin layers and cured between passes so the film stays flexible and won't crack under compression.

5 5,000-cycle compression test

Every production run is lab-tested: 5,000 compressions at 60% stroke, then a Delta-E color check. If it drifts, we re-engineer — not re-print.

Ready to spec your custom stress toy?

Share your design for a free material recommendation, engineering review, and transparent cost breakdown — within 24 hours.

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