



PS-C012 POOL SUBSTRATE IDENTIFICATION GUIDE: GEL COAT OR ACRYLIC

INTRODUCTION:

To determine whether a spa is made of gel coat or acrylic, you can perform a few tests. Here are some methods you can try:

PROCEDURE:

1. Visual Appearance

Acrylic:

- 1. Often has a glossy, mirror-like shine.
- 2. Typically has **consistent colour** throughout the surface.
- 3. May show moulded contours and integrated features cleanly.

Gel Coat (on fiberglass):

- 4. Slightly less glossy than acrylic.
- 5. May show very **fine hairline cracks** (crazing) over time, especially in older units.
- 6. Sometimes you can see a subtle textured or orange peel look

2. Touch and Flexibility

Acrylic:

- 1. Feels **smooth and hard**, slightly warmer to the touch.
- 2. Does not flex easily under pressure.

Gel Coat:

- 3. Also, smooth but may feel a bit more brittle or cooler.
- 4. On older spas, tapping may give a hollower sound.

Tap Test: Gently tap the surface of the spa with your knuckles. Acrylic tubs tend to produce a solid, dull sound, while gel coat tubs may sound hollow or echo1.

3. Construction Layers (Check Underside or an Access Panel)

Acrylic spas are made of a thin acrylic sheet that is backed with ABS plastic or fiberglass for strength. You may see:

- 1. A layered structure (acrylic top, then reinforcement).
- 2. Sometimes visible ABS backing usually black or dark grey.

Gel coat spas are typically made by spraying a gel coat layer into a Mold, then applying **fiberglass directly on top**. The back side will look:

- 3. Rough and fibrous, often yellowish or beige.
- 4. No distinct plastic sheet layer like in acrylic.
- 4. **Temperature Test**: Touch the surface of the spa with your hand. Acrylic tubs generally feel warm to the touch, while gel coat tubs may feel cooler1.
- 5. Age and Brand Clues
 - 1. Older or cheaper spa pools (especially pre-2000s or budget models) are more likely to be gel coat fiberglass.
 - 2. Premium modern spas are usually acrylic, due to better durability, insulation, and appearance.
- 6. **Chemical Test**: Apply a small amount of acetone or nail polish remover to an inconspicuous area of the spa. If the surface becomes tacky or sticky, it is likely made of gel coat1.

Please note that these tests are not foolproof and may not provide definitive results. If you are unsure about the material of your spa, it is best to consult the manufacturer or a professional in the industry for accurate identification and advice.

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