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## PET bottled beverages with the finest labels on the market Rafwash and recycle

UPM Raflatac's innovative Rafwash labelstocks are the perfect partner for the latest PET recycling processes. As returned bottles are crushed into flakes and washed in hot alkaline water, the temperature-sensitive RC 7W adhesive releases with the label face to leave the wash bath and bottle material contaminant-free. The recovered food-grade PET material is reformed into sparkling new bottles, ready for yet another stylish Rafwash label.

Rafwash labels offer the premium, self-adhesive alternative to wrap-around labels that the beverage industry has been waiting for. There's now vastly more potential for decoration with innovative label shapes, higher quality graphics and a wider choice of bottle profile. Moreover, there's a money back guarantee on bottle deposits – brand loyalty sticks, just like the label.

Two glossy polypropylene-based faces in the range provide a crystal-clear no-label look: Rafwash Clear TC 50 and Rafwash Clear IL 60, which has been further optimized for digital Indigo printing and is ideal for smaller promotional or custom runs. A third option, Rafwash White TC 60, provides all the high gloss and opacity required for success with upmarket graphic design.

- A new level of brand differentiation for recyclable PET bottles
- Top-end performance in high-speed dispensing
- Approved for PET bottle-to-bottle recycling by Cleanaway PET International GmbH

**UPM RAFLATAC**

# UPM RAFLATAC TECHNICAL INFORMATION

9/2008 ENG 1144

SELF-ADHESIVE ROLLS  
 WASH-OFF ADHESIVE RC 7W (sales code)  
 Type Temperature-sensitive, clear acrylic adhesive for wash-off film labels in PET bottle-to-bottle recycling.

## Typical technical values

Tack min 5 N FTM 9  
 Labelling temperature min 5 °C  
 Service temperature min -10 °C  
 Service temperature max 120 °C

| FACE         | RAFWASH CLEAR TC 50  | RAFWASH CLEAR IL 60   | RAFWASH WHITE TC 60  |
|--------------|--|---|--|
| FILMIC       | ARE (sales code)   | ARC (sales code)  | ARD (sales code)   |
| Product      | Ultra-clear and glossy, top-coated modified polypropylene film for PET bottle recycling.   | Ultra-clear and glossy, Indigo top-coated modified polypropylene film for PET bottle recycling.   | White and glossy, top-coated modified polypropylene film suitable for PET bottle recycling.  |
| Substance    | 46 g/m <sup>2</sup> DIN 53352  | 54 g/m <sup>2</sup> DIN 53352   | 45 g/m <sup>2</sup> DIN 53352  |
| Caliper      | 51 µm DIN 53370  | 60 µm DIN 53370   | 60 µm DIN 53370  |
| Printability | Flexography, screen, letterpress and offset. Special inks designed for non-absorbent materials should be used. Thermal transfer with selected ribbons. | Optimized for the Indigo Omnius and Gallus Indigo DO 330 digital printing presses. Also suitable for thermal transfer with selected ribbons. Pre-testing recommended for conventional printing methods. | Flexography, screen, letterpress and offset. Special inks designed for non-absorbent materials should be used. Thermal transfer with selected ribbons. |

**Use** Clear and white filmic wash-off labels for PET beverage bottles destined for the PET recycling process. The labels can be washed off in hot caustic and separated from ground-up PET bottles by gravity, leaving available pure, food-grade polyester suitable for bottle-to-bottle use. The non-bleeding adhesive provides excellent performance in high-speed dispensing and retains its high and lasting clarity even in wet conditions.

**Limitations** For optimal wash-off performance, the washing caustic should be  $\geq 80$  °C and the NaOH concentration  $\geq 1.5\%$ . The wash-off properties may be reduced if labels are stored in high temperatures or under UV exposure (such as outdoor conditions) for long periods of time.

**Shelf life** From the date of manufacture: 1 year at 20 °C and RH 50%

**Additional information** Rafwash Clear TC 50, Rafwash White TC 60 and Rafwash Clear IL 60 with the RC 7W Rafwash adhesive have been approved for PET bottle-to-bottle recycling by Cleanaway PET International GmbH.

**Warranty** Our recommendations are based on our most current knowledge and experience. As our products are used in conditions beyond our control, we cannot assume any liability for damage caused through their use. This publication replaces all previous versions. All information is subject to change without notice.

