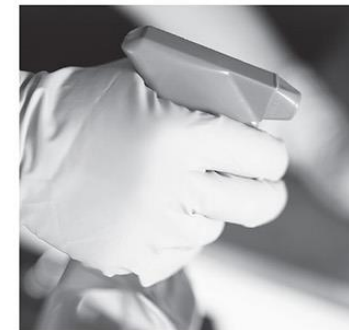


# rPET Standard in South Africa

17 Jan 2024

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■ Recycled PET Standard: SANS 1548-1

■ Existing Landscape

■ Challenges

## SANS 1548-1:2017

■ Use of recycled plastics materials intended to come into contact with food

■ Part 1: PET

PET plastics waste might contain unwanted substances that came into contact with it before it was collected for recycling; it might contaminate the plastics and negatively influence a food product on contact.

*No package, wrapper, container, or appliance used in connection with food shall be of such composition or nature as to yield, or be liable to yield, to its food contents, or to the food with which it comes into contact, any unwholesome, injurious or poisonous substance.*

*(Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No 54 of 1972))*

# SANS 1548-1:2017

To ensure food safety in contact with recycled plastics, need to evaluate:

- Characteristics of feedstock material
- Sorting Efficiency
- Decontamination effectiveness of process

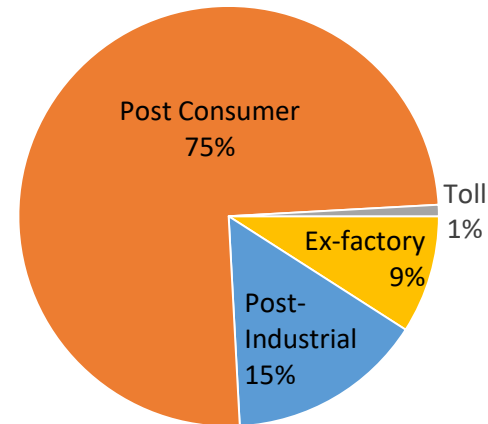
Voluntary standard only



# SANS 1548-1:2017 - Feedstock

To ensure food safety in contact with recycled plastics, need to evaluate:

- Characteristics of feedstock material



# SANS 1548-1:2017 - Sorting

## ■ Sorting:

- Manual – waste reclaimer, buyback centre and recycling operator
  - Negative picking – remove unwanted items
  - Positive picking – pick only wanted items
  - Larger formats – 330ml and bigger
- Infrared sorting – bottles, flakes and pellets
- Sniffers



# SANS 1548-1:2017 - Reprocessing

Basic process involves washing reforming material

- Reduce potential contamination
- Company and site specific
- Scientific opinion from EFSA on the non-objection from the FDA



vs.



Picture: Extrupet in Johannesburg – Phoenix PET

# SANS 1548-1:2017 - Reprocessing

Basic process involves washing reforming material

- Reduce potential contamination
- Company and site specific
- Scientific opinion from EFSA on the non-objection from the FDA
- Quality Assurance system



Picture: Extrupet in Johannesburg – Phoenix PET

# Existing landscape

## Reprocessing or Recycling



### Bottle to Fibre

- 4 processors
- domestic and export markets



### Bottle to bottle

- 2 processors
- capacity 20% of total domestic beverage bottle market
- New investment in 2024/5



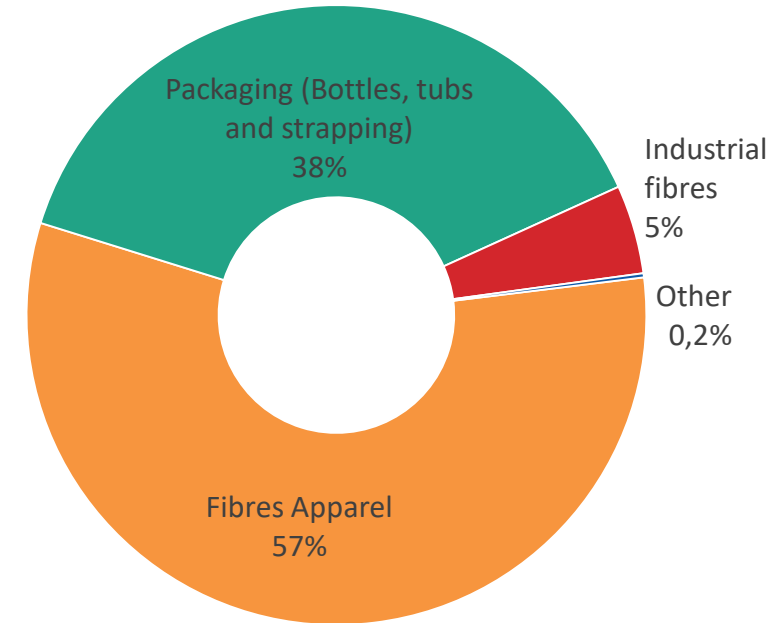
### Bottle to flake

- 4 processors
- domestic and export markets



### Bottle to "other"

- 1 processor into *polywood* applications





# Existing landscape

## rPET food contact applications



Bonaqua water bottle – 100%

Carbonated soft drinks – 25%

Cordial drinks – 100%

Sunflower oil – 25%

Salad dressing – 35%

Fruit juices – 50%

Fruit and Milk mixed drinks – 50%

Punnets – 30 to 100%



Source:  
Phoenix  
PET



## Trade issues

- Capacity/Skills of Customs and Excise departments
- Country of origin
- Classification:
  - Primary
  - Packaging or Product
  - Plastic Waste

## Standards

- ARSO, SANS, ISO .....
- Voluntary
- Brand-owners to request? Enforce?



# Challenges

## Existing and potential

## Design for Recycling / Circularity:

- Printed bottles
- Coloured bottles
- Closures
- Labels:
  - Adhesives
  - Paper
  - Material choice



## Contents

- Many non-food applications

Not the **only** material – don't make exceptions – address all plastics waste

# Challenges

## Existing and potential

# Thank you!

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