



# PETCORE EUROPE **TEXTILE SIG**

**Christian Crépet**



# Creation 1993



Minutes of the First Meeting of the PETCORE Board, December 1st 1993,  
Sheraton Airport Hotel, Brussels.

Present

E. Berci	Inca
P.J. Bruce	ICI
R.A. Crawshaw	Shell
R. Enter	AKZO
P. Geluk	Eastman
G. Kleimenhagen	EAPC
M. Matteoli	Johnson Controls
M. Rodriguez	Continental PET
J. Sami	Eastman
H-J. Otto	Hoechst

V. Matthews, Secretary and Mrs N Russotto of APME.

H. P.M. van Hassel of Constar apologised for not being able to attend.

## Publications

Design for recycling ( in English/F/G/I/Sp)	Nov 1993
PETCORE Launch	Dec 1993 ( Press R for Jan 10th 1994)
PETCORE Brochure	Jan 1994?
PETCORE Recycling options	Jan 1994?
PETCORE Specifications	Feb 1994?



# More regulation to come on POLYESTER

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## EU TEXTILE STRATEGY

1. Mandatory eco-design requirements: fibre to fibre recyclability. (mentioning in the text a circular model alike the PET bottles)
2. Transparency obligations for Reuse and Recycling.
3. Labels identifying the fibre composition/ Information at the point of sales.
4. Environmental Footprint will be taken care of.
5. Ban on destruction considered
6. EPR : obligation to establish separate collection and eco-modulation
7. ...

# WHY a new SIG Group?




- **Created in April 2023:**

- No revealed Polyester specialist in Brussels to handle CRPet beside PETCORE
- Fill by 2025 the newly installed PET DEPOLYMERIZATION PLANTS.
- Develop TEXTILE MECHANICAL RECYCLING.
- Elaborate a POLYESTER « circular model alike PET Bottles » for Packaging and Textile fibres circularity.



# Recyclability Evaluation Platforms

→ **European PET Bottle Platform (EPBP)** - since 2008 - **European harmonized** guidelines for PET bottles recyclability across the value chain Encouraging industry to test new PET bottle concepts and/or material before market launch

<b>YES</b> Full compatibility – materials that passed the testing protocols with no negative impact	<b>CONDITIONAL</b> Limited compatibility – materials that passed the testing protocols if certain conditions are met	<b>NO</b> Low compatibility – materials that failed the testing protocols OR
		



→ **Trays Circularity evaluation platform (TCEP)** - Since 2021 European harmonised guidelines and protocol for PET trays recyclability – Same mindset than the successful EPBP.



# DfR's and Sorting for recycling of Mix Synthetic Textiles and Polycotton guidance's

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## **1/ Mechanical PES recycling**

Two mechanical textile technology global leaders and members of PETCORE EUROPE specify:

1. Less than 1% of Cotton and Cellulose (maybe Rayon also.)
2. Less than 5% of PU/PP/PE.

## **2/ Mix Synthetic Fibres Depolymerization**

10 EU PES CHEMICAL RECYCLERS and members of PETCORE EUROPE are technically efficient for recycling within lower and higher limits of contaminants starting from 5% to 30% of:

1. PES+PU
2. PES+PA
3. PES+PE or PP

- NB: ACRYLICS remains an issue to be solved by most recyclers where the technologies have incompatibilities with ACRYLICS which need to be taken into consideration by the textile industry. The same would apply for PVC coating.



# DfR's and Sorting for recycling of Mix Synthetic Textiles and Polycotton guidance's

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## **3/Depolymerization of Polycotton**

- Technically most chemical recyclers have no limits but can be economically viable within only the following ranges:
  1. From 5% Cotton
  2. To a maximum of 40% Cotton.

**NB: the non-economically viable percentages which typically are containing from 40 to 95% cotton could be acceptable for the cotton industry. Therefore, it remains necessary to coordinate an approach with the cotton recyclers. The question of the 5% PES in the cotton waste stream is also to be raised to the cotton industry.**

## **4/Glossary of Terms**

- **DfR** Design for Recycling
- **PES** Polyester
- **PU** Polyurethane
- **PA** Polyamide
- **PP** Polypropylene
- **PE** Polyethylene



# 1st basis for DfR draft and conclusions

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## ACTIONS & CONCLUSION

### VALIDATE the GUIDELINES FOR THE EU COMMISSION WITH

1. NATIONAL EPR's
2. NIR sorting firms such as PELLENC or TOMRA
3. Textile industry and its Associations





**Ask yourself: what you can do to make a better world?**

**JOIN us in improving the PET Value CHAIN!**

