



# Design for Recycling & Circularity

Thermoforms Conference

### Meet Sukano

## A Family Business with **Global Presence**

Your specialist for tailor made **additive and color masterbatches** in polyesters, biopolymers, engineering resins, and high-temperature polymers.



- Headquartered in Switzerland with manufacturing facilities located on 3 different continents
- o Global distribution network
- Regional application developments, production, sale and technical services
- 100+ employees worldwide
- o 35+ years experience



# **Challenges** in the PET Recycling Market

### **1.** Quality of Recycled PET (rPET)

- Maintaining consistent quality for food-contact applications and packaging
- Sukano's Contribution
  - Innovative **masterbatches** to enhance rPET processing performance and material properties

#### **3.** Collection and Sorting

- Addressing regional disparities in PET collection and sorting systems
- Sukano's Role
  - Enhancing material design for improved detectability and sorting efficiency

#### 2. Recyclability and Certifications

- Complying with global standards for food safety and recyclability
- Sukano's Contribution
  - Ensuring compliance with certifications for safe rPET use also in multiple loops
  - Technical support for **Design for Recycling (DfR)** guidelines to ensure compatibility with the recycling stream

### 4. Regulatory and Market Dynamics

- Meeting ambitious recycled content targets, including stringent degrees of purity
- Sukano's Role
  - Absence by design of specific chemical substances; NIAS
  - Partnering across the value chain to achieve circular economy goals



### Mechanical Recycling Protocols

**PETCORE Tray Circularity Evaluation Protocol (TCEP) and EPBP** quick tests for PET Recycling replicated in our lab

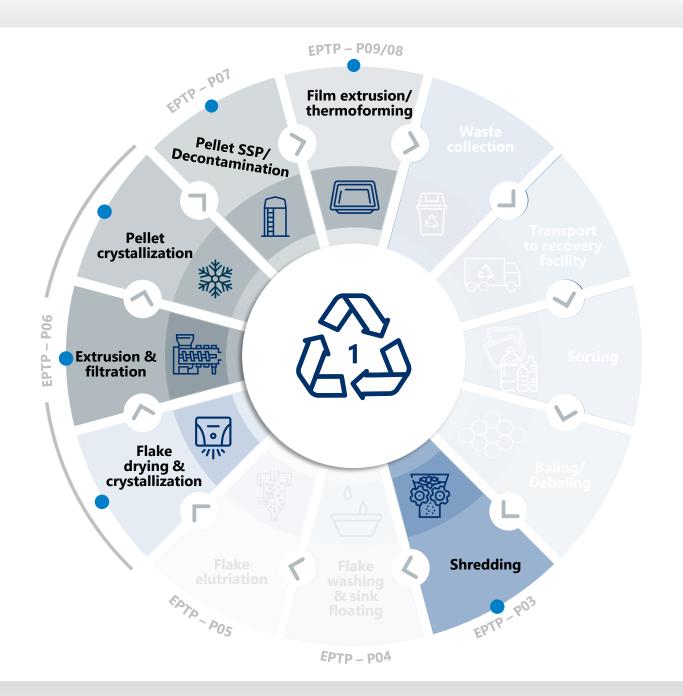
### Sukano supports the UN Sustainable Development Goals:



800

**78%** is designed for existing mechanical recycling streams

**91%** supports food safety and minimizes waste



### **Product Portfolio** to Enhance the Use of **rPET**



### **Melt Viscosity Enhancers**

- o IV recovery
- Reduced SSP time
- Stable processing

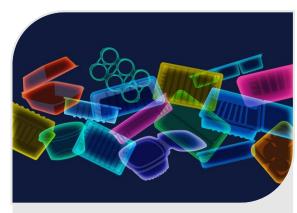
### **Color Correction**

- Anti-yellowing effect
- Neutralization
- Bright and white opaque



### **Impact Modifiers**

- Enables flash frozen & cold applications
- Shatter resistant
- Available in transparent



### **NIR Detectable Colors**

- PET detection and sorting
- o Colored and black PET
- Improved quality of recycling streams



### Sukano's masterbatches are also available on rPET carrier



### Driven by expertise

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