Compliance and quality expectation for recycled plastics

Forum pilot project on Recovered Substances exempted from REACH registration 30.11.2022



There are many legislations being updated currently, all supporting the transition to circular economy



Recycled Plastics: status quo

Recycled content in products rising slowly (about 11,7% in Germany, of which 9,1% are PCR and 2,6% PIR) and mostly used in construction products, packaging and agricultural products¹

Almost all recycling of plastic is recovered through mechanical processes and falls under REACH article 2.7 d):

- (d) substances, on their own, in preparations or in articles, which have been registered in accordance with Title II and which are recovered in the Community if:
 - (i) the substance that results from the recovery process is the same as the substance that has been registered in accordance with Title II; and
 - (ii) the information required by Articles 31 or 32 relating to the substance that has been registered in accordance with Title II is available to the establishment undertaking the recovery.

Documentation for recycled polymers:

- 1. Safety Data Sheet
- 2. Material Technical Data Sheet (contains information on purity)



¹Source: Conversio Study 2021, PCR: Post Consumer Recyclates, PIR: Post Industrial Recylates

Recycling industry initiatives and development



Transition towards circular economy: More amount at better quality

Currently industry is working on developing standards for quality assessment and documentation:









RecyClass

DIN 1534*, DIN Spec 91446, PRE Standards, Standardization Roadmap DIN/ISO, CPA (Technical data sheet, EoW criteria)

Cospatox, PRE 1000 (Contamination, substances, applications)

Recyclass (D4R, Recycled content verification model)

But pastics (products) are very "diverse": Requirements, thresholds and contaminant list may differ for polymers and applications (Example: PBDE check in WEEE but not in packaging)

Overall goal in defining requirements:

→ Make recycling sustainable, trustworthy and cost-effective to succeed in circular economy



Recycling process at a glance





precise sorting



effective washing



reliable granulating

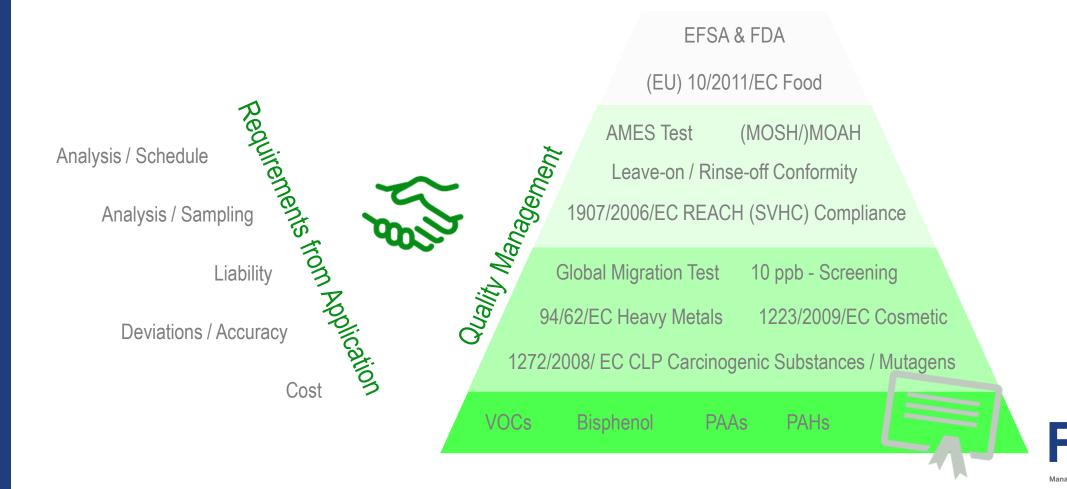


innovative decontamination

of post-consumer plastics & preparing them for reuse in **high quality applications**.



Example: Quality Assurance in Recycling



To wrap up...

- Plastics (recycling) in transition, under high level of (legislative) attention.
 Many parallel actions → High effort of coordination needed
- Plastic recycling industry invested in further development, initiatives ongoing

Plastic recycling is key for circular economy and sustainability





ANY FURTHER QUESTIONS?



Thanks for the attention!

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