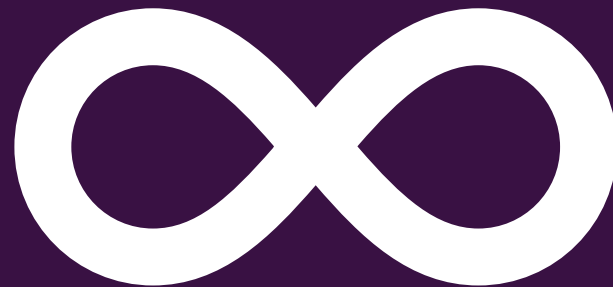


Glass og metall

Infinite loop?





Infinite loop?

Metall eller metall

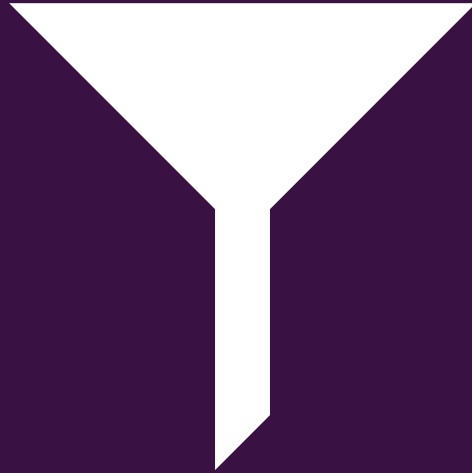
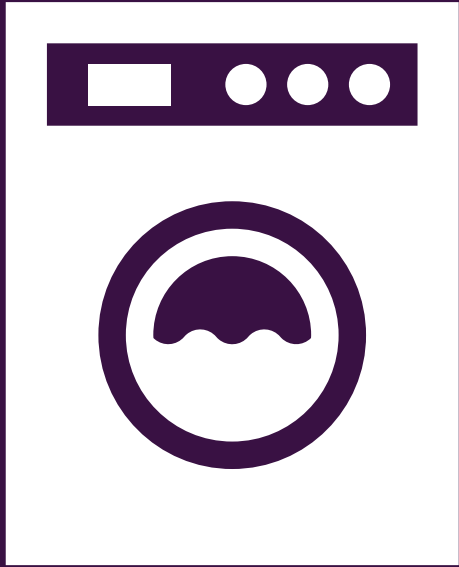


Vekt og transport
VS
energi i ny produksjon



Fiber

Er det løsningen på alle våre problemer?



Gjenvinning av fiber

www.papertr.com



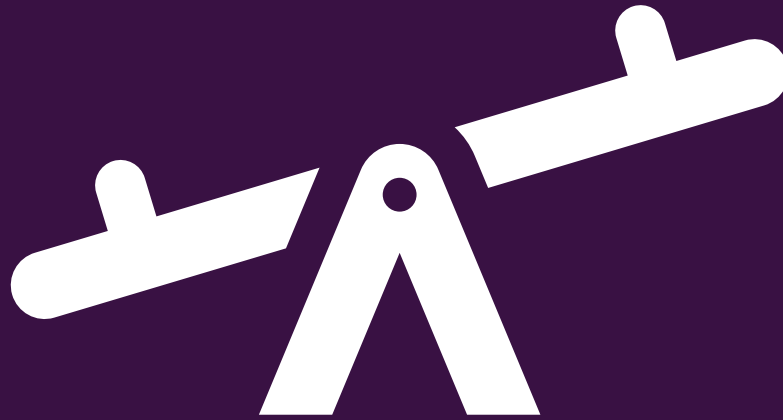
God kollega 30.06.2022 08:39

Jeg kom over denne i går: Et kjent merke har lansert solkrem på ny tube. Spanderer Emballasjeavdelingen den på meg hvis dere får emballasjen?



Et kjent merke har lansert solkrem på ny tube.





- Kan redusere behovet for (dårlig) plast
- Kan ikke gjenvinnes uendelig mange ganger
- Kan ikke brukes til mat (uten plast)
- Kan det brukes igjen

Fully compatible with standard recycling process	Conditionally compatible with standard recycling process	Not compatible with standard recycling process	Compatibility with recycling process unknown
<ul style="list-style-type: none"> > compatible with sorting according to standard paper grades > no disturbing parts within the recycling process > expected positive output quality after recycling for target product > existing test results show good compatibility with standard recycling process 	<ul style="list-style-type: none"> > sorting not guaranteed in all cases > the efficiency of the recycling process is affected > compromised output quality after recycling with standard recycling process 	<ul style="list-style-type: none"> > major issues during sorting and/or recycling > non-feasible output quality for further treatment after recycling > existing test results show low compatibility with standard recycling process 	<ul style="list-style-type: none"> > based on current knowledge no clear guidance is possible > testing is required to examine the recyclability of the packaging with standard recycling process

Component	Sub-category	Fully compatible with standard recycling process	Conditionally compatible with standard recycling process	Not compatible with standard recycling process	Compatibility with recycling process unknown	Comment
Filler/ Inorganic pigments	Clay (kaolin)	⊗				High ash content may have a negative impact on mechanical strength depending on the relative amount in the PFR stream. Threshold needed.
	CaCO ₃	⊗				
	Talc	⊗				
	Titanium dioxide	⊗				
Binder	S/B latex	⊗				Depending on amount, adhesive strength, etc.
	S/A latex	●				
	Starch-binder	⊗				
Sizing, wet end	AKD	⊗				
	ASA	●				
	Rosin	⊗				
Dry strength	Starch	●				
	CMC	⊗				
	Polyacrylamide	●				
	Guargum	⊗				
Wet strength	PAE		⊗			Recyclability depends on a number of factors, such as relative wet-strength (WS) level, amount of WS agent, etc. Recyclability can be improved by increased pulping temperature and time, chemicals, high consistency pulping, etc. Testing is needed to evaluate the recyclability and set thresholds for acceptable levels in the PFR stream.
	Urea/Formaldehyde				⊗	Recyclability depends on a number of factors such as relative wet strength level, amount of WS agent etc. Recyclability can be improved by e.g. increased pulping temperature and time, chemicals, high consistency pulping etc. Testing is needed to evaluate the recyclability and set thresholds for acceptable levels in the PFR stream.
	Urea/Melamine				⊗	Unclear whether these WS agents are still used in paper and board manufacturing. Testing needed to evaluate recyclability and set thresholds.
	Glyoxylated polyacrylamide (GPAM)	⊗				
Sizing, surface	Starch	●				

Component	Sub-category	Fully compatible with standard recycling process	Conditionally compatible with standard recycling process	Not compatible with standard recycling process	Compatibility with recycling process unknown	Comment
Other	Colorants/dye for sha	⊗				Physically recyclable but certain dyes are not approved for food packaging applications and such dyes should be avoided.
	Colorants/pigments	⊗				
	Polyvinyl alcohol	⊗				
	PAC	⊗				
	Retention polymers	⊗				
	Siliconising agents			⊗		

Table 4. Compact design table for different materials and components



Materialgjenvinningsgrad



Norsirks
resultat i
2022

72%

71%

58%

37%

71%

89%

65%

Krav i
2022

65%

60%

50%

30%

60%

60%

60%

Krav
fra
2025

80%

60%

--

47%

70%

70%

50%

