



Packaging for your life.



**GUIDELINE
PCR PLASTIC RECYCLATES**

PCR PLASTIC AT LINHARDT

Closed loops are one of the trending topics of the packaging industry. Aside from increased recyclability, this also requires the use of recycled material for new products. At LINHARDT we are able to offer a choice of different PCR recyclates. At the moment, we have qualified four suppliers of PCR plastic. However, the characteristics of the recyclates may vary significantly. This guideline is meant to provide assistance with choosing the best PCR material for your specific application.

ADDITIONAL INFORMATION

If you'd like to get more information regarding the different PCR materials or the use of PCR in a specific product, we are happy to provide advice.

As a matter of principle, we provide our customers with the relevant documentation on the above-mentioned conformities for all products upon request. If required, information on the fulfilment of limit values, with regard to a toxicological investigation (global migration and specific migration) of the starting granulate, can also be provided. In any case, however, a risk assessment is not provided by LINHARDT, but must be carried out by the distributor himself or by a service provider commissioned by him, as required by law.

LINHARDT GROUP GMBH

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MATERIAL CHARACTERISTICS

	Virgin PE	Greenstar	PreFin	Planolen	Mothylene
Producer	-	Biffa	WIS	Re Plano	Morssinkhof
Source	-	Recyclate from milk cans	Recyclate from containers and waste primarily from the food industry, partly without contact with filling material	Recyclate from household waste with contact with filling material	Recyclate from household waste with contact with filling material
Colour	Natural	Greenish sheen	Natural	Slightly greyish sheen	Slightly yellowish sheen
Transparency	++++	-	++++	++	+++
Smell	++++	++ Slightly sour	+++ Almost neutral	+++ Slightly soapy	+++ Slightly soapy
Processability	++++	+	+++	+++	++
Printing quality	++++	+	+++	+++	++
Sufficient supply	Yes	Yes	Yes	Yes	Yes
Use	Leave-On, Rinse-Off, Food	Leave-On, Rinse-Off		Rinse-Off	
Conformities		1935/2004 EG contact with food 10/2011 EU materials and articles 2023/2006 GMP			
		94/62 EG packaging directive 1907/2006 EG Reach 1223/2009 EG cosmetics regulation			

LINHARDT PCR PORTFOLIO

SPECIFICATIONS TRANSPARENT TUBES

Wall thicknesses 0.50 mm | 0.40 mm* | 0.35 mm | 0.30 mm | 0.27 mm

50% PCR
available with Planolen,
Mothylene

| 50% LLDPE
with Virgin PE

50% HDPE PCR
with PreFin

| 50% LLDPE PCR
with PreFin

LINHARDT PCR PORTFOLIO

SPECIFICATIONS PREFIN

in cooperation with



Wall thicknesses **0.50 mm** | **0.40 mm*** | **0.35 mm** | **0.30 mm** | **0.27 mm**

48% HDPE PCR

| 48% LLDPE PCR

| 4% Masterbatch

SPECIFICATIONS ALTERNATIVE MATERIALS

Wall thickness **0.50 mm**

67,2% PCR

available with Greenstar, Planolen, Mothylene & PreFin

| **28,8% LLDPE**

with Virgin PE

| **4% Masterbatch**

Wall thickness **0.40 mm***

67,2% PCR

available with Greenstar, Planolen, Mothylene & PreFin

| **28,8% LLDPE**

with Virgin PE

| **4% Masterbatch**

77% PCR

available with Planolen & PreFin

| **19% LLDPE**

with Virgin PE

| **4% Masterbatch**

96% PCR

available with Planolen & PreFin

| **4% Masterbatch**

Wall thickness **0.35 mm**

71% PCR

available with Greenstar, Mothylene & PreFin

| **25% LLDPE**

with Virgin PE

| **4% Masterbatch**

77% PCR

available with Planolen & PreFin

| **19% LLDPE**

with Virgin PE

| **4% Masterbatch**

96% PCR

available with Planolen & PreFin

| **4% Masterbatch**

Wall thickness **0.30 mm**

77% PCR

available with Planolen, Mothylene & PreFin

| **19% LLDPE**

with Virgin PE

| **4% Masterbatch**

96% PCR

available with Planolen & PreFin

| **4% Masterbatch**

Wall thickness **0.27 mm**

71% PCR

available with Greenstar, Planolen, Mothylene & PreFin

| **25% LLDPE**

with Virgin PE

| **4% Masterbatch**

*Only available in diameters 13.5 mm – 22 mm.