



**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
<b>Producer</b>	-	Biffa	WIS	Re Plano	Morssinkhof
<b>Source</b>	-	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
<b>Colour</b>	Natural	Greenish sheen	Natural	Slightly greyish sheen	Slightly yellowish sheen
<b>Transparency</b>	++++	-	++++	++	+++
<b>Smell</b>	++++	++ Slightly sour	+++ Almost neutral	+++ Slightly soapy	+++ Slightly soapy
<b>Processability</b>	++++	+	+++	+++	++
<b>Printing quality</b>	++++	+	+++	+++	++
<b>Sufficient supply</b>	Yes	Yes	Yes	Yes	Yes
<b>Use</b>	Leave-On, Rinse-Off, Food	Leave-On, Rinse-Off		Rinse-Off	
<b>Conformities</b>		The recyclates meet the formal requirements of the regulations 1935/2004 EC Food Contact, 10/2011 EU Consumer Goods and 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.