# **A Material Difference** Lifolit®

### Soft PVC Compounds









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# Introduction

Lifolit are a family of high-quality, soft polyvinyl chloride (PVC) compounds, custom formulated to your requirements.

PVC is a building block of our daily lives, its versatility and performance benefits make it an ideal choice for a wide variety of applications in the construction, consumer, industrial, toy and automotive markets.

We've been developing PVC compounds since 1965 and continue to engineer new solutions to address current and emerging market demands. As concerns grew over the use of certain plasticizers in PVC compounds, we have developed non phthalate, DEHP free and low VOC compounds.

Our aim is to provide the best material solution for every application; our experts work hand-in-hand with you to develop customised solutions that help your business to grow. Please use this guide as an introduction to the Lifolit range and **contact us** to discuss your specific requirements.

# **Key Properties**

- Hardness range from 40 Shore A to 60 Shore D
- Free of heavy metals and PAHs
- Food contact grades
- Non phthalate plasticizer
- All compounds are DEHP free
- Good UV resistance and weatherproofing

- Crystal clear, translucent, natural or colour compounded grades
- Foamed grades up to a density of 0.45g/cm3
- Antistatic and conductive grades available
- Polymer blends
- Easy to process via injection moulding and extrusion

# **Typical Applications**

- Footwear
- Toys
- Glazing profiles
- Construction gaskets
- Hoses
- Handles & Grips

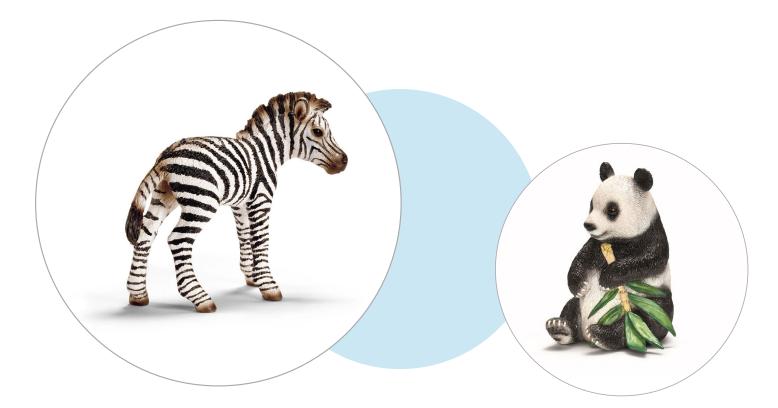


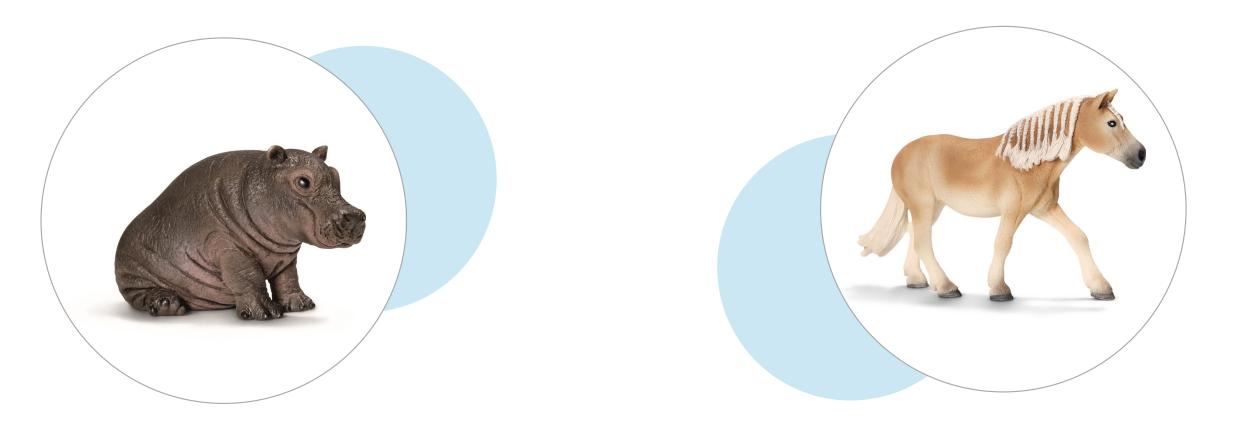
# **Toy Figures**

These toy figurines are incredibly life-like, lovingly created and beautifully designed products. The manufacturer puts their responsibility to parents and children at the heart of their philosophy and only works with the highest quality materials and suppliers.

We have been a supply partner for a number of years. Our Lifolit PVC compounds are an ideal choice for toy and childcare products, they conform to relevant industry standards and regulations such as EN 71/3. We also select the raw materials we use carefully, implementing strict quality control processes. The raw materials we use comply with EU directive No. 10/2011.

Lifolit PVC compounds are low odour, with low migration levels for improved lacquer adhesion. Varnishing is also possible. The compounds are also easy to process, with fast cycle times resulting in low energy costs during manufacturing.



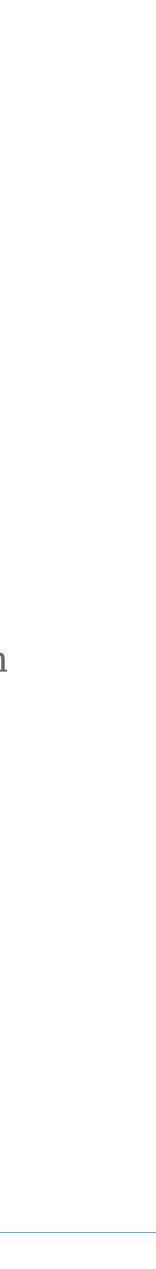


# Non Phthalate & DEHP Free Grades

To address consumer concerns over the potential health and environmental risks of certain plasticizers used in the manufacture of PVC compounds, we have developed the Lifolit range to include several non phthalate alternatives.

This helps our customers to comply with tightening regulations governing the use of phthalates. Particularly in the toy and childcare market, where non phthalate compounds have become the industry standard in response to directives such as EU 2005/84/EC.

We work with a number of raw materials and plasticizers to give the best performance / cost ratio while always keeping in compliance with the different levels of phthalate use. This includes DEHP free PVC as well as grades that are considered low in Volatile Organic Compounds (VOCs).



# **Specialised Lifolit Grades**

#### Foamed PVC

For footwear and shoe sole applications we have developed several grades of foamed Lifolit PVC. They are foamed up to a density of 0.65g/ cm3. With extrusion processing densities up to 0.45g/cm3. We also offer grades with no chemical blowing agents which can be processed at temperatures up to 195°C. They also have a very fine cell structure.

#### **PVC Blends**

By blending nitrile rubber (NBR) or other polymers, such as TPU, we have created PVC compounds with very elastic properties. Our PVC blends also allow us to modify very specific properties such as abrasion and chemical resistance.

### Antistatic, Conductives & Flame Retardant Grades

The Lifolit range includes antistatic and conductive PVC grades. Designed to dissipate electrical charges where EMI or static build-up could cause interference. We also offer flame retardant PVC compounds which comply with RoHS regulations.



# Lifolit Typical Grades

Lifolit Grade	Hardness Shore A (3 s)1	Processing Method	Typical Applications	Key Properties
E 73.1340/2 glasklar	75	Extrusion	Profiles, hoses	Crystal Clear
E 75. 1284/2 glasklar NP	75	Extrusion	Profiles, hoses	Crystal clear, phthalate free
SG 60.0515/1	50	Injection Moulding	Foamed shoe soles	Phthalate free
SG 53.1380/1 HT	50	Injection Moulding	Foamed shoe soles	No chemical blowing agents, high tempertaures <sup>2</sup>
SG 88.0532/1 natur	85	Injection Moulding	Toys	Conforms to EN 71/3
E 75.0898/1	75	Extrusion/Coextrusion	Coextruded profiles & gaskets	Improved compression set
SG 45.1095/1 NP	45	Injection Moulding	Handles, grips	Soft touch with improved haptics. Phthalate free

<sup>1</sup> Test Method: DIN 53505 (A)

<sup>2</sup> For temperatures up to 195°C, very fine cell structure

## Processing

Lifolit PVC compounds are easy to process via injection moulding, extrusion, blow moulding and deep drawing.

We have engineered flexible PVC compounds with very high flowability, ideal for injection moulding, as well as highly viscous grades for extrusion.

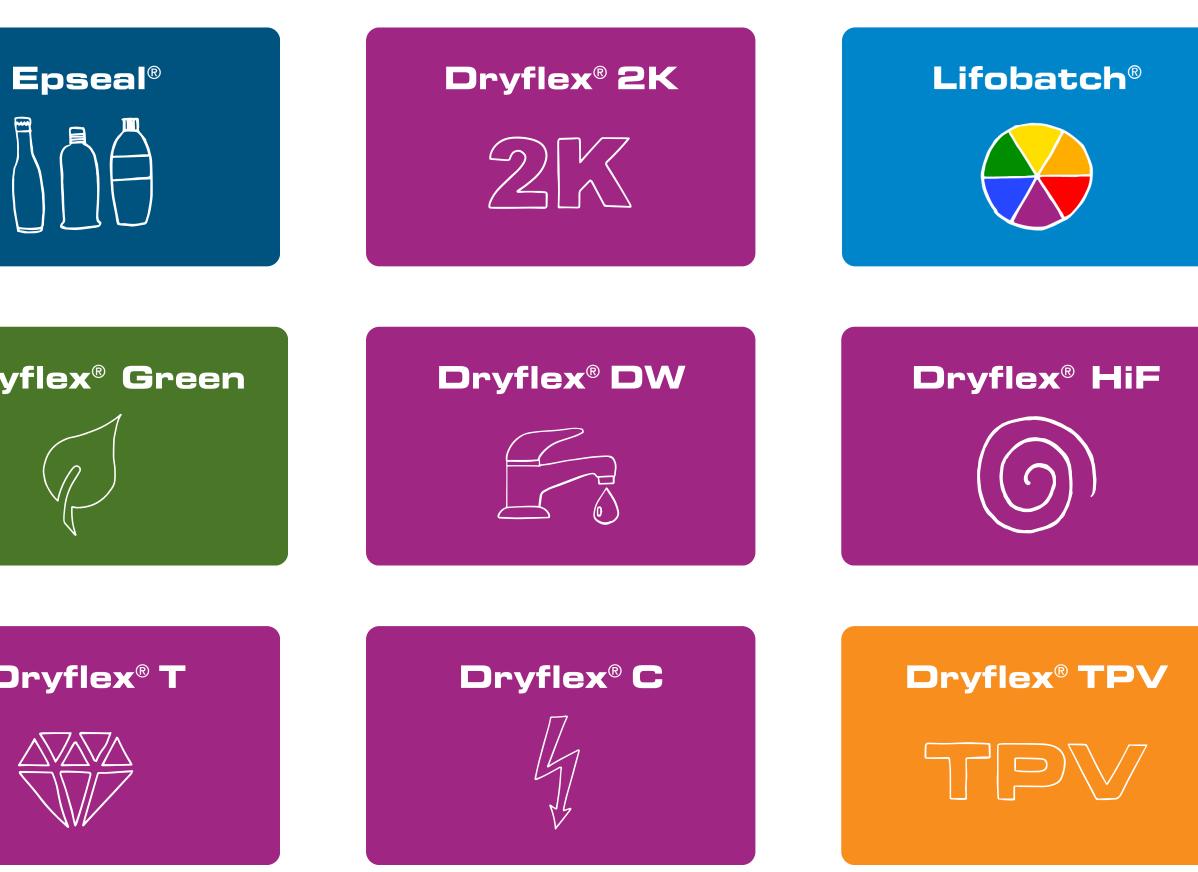
Lifolit PVC compounds result in fast cycling times, meaning low energy costs during manufacture of the final application.

More Processing & Problem Solving Information >

## More Product Ranges

Click for more information

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