



Calyshield™

Calyshield™ L Self-lubricating microcapsules

Calyshield™ F Flame-retardant microcapsules

Calyshield™ U UV-absorbing microcapsules

With our Calyshield microcapsules product line, we ensure that functional ingredients are fully protected and compatible with the polymer matrix or the formulation and that they are released during use of the material to enable new properties and maximum performance.

Calyshield™ microcapsules provide many benefits



Full protection of functional materials against degradation, hydrolysis, oxidation AND cross-reaction even in the most demanding conditions.



Long-lasting performance during use of your products



Full compatibility of functional materials within your polymer matrix of formation



More durability, longer service life and consistent high quality of your products.



Calyshield™

Self-lubricating microcapsules

Calyshield L capsules are self-lubricating microcapsules providing abrasion and wear resistance as well as water fastness and surface hydrophobicity for numerous applications:

Features

- ✓ Easy to incorporate size-controlled lubricant microcapsules
- ✓ Can be processed even in extreme conditions (extrusion, compression & injection molding, ...)
- ✓ Provides a lubricant reservoir during the lifetime of the polymers or the coatings
- ✓ **Plastics & Polymers**
- ✓ **Paints & Coatings**
- ✓ **Wires & Cables**
- ✓ **Composites**
- ✓ **Inks**

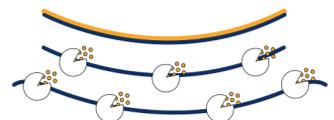
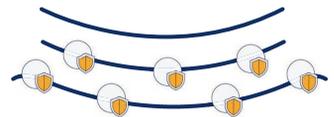


How does it work ?

On abrasion or wear:

Calyshield L microcapsules open and deliver the lubricant to the surface of the material, preventing further wear.

Compared to traditional lubricants, our Calyshield self-lubricating microcapsules improve abrasion and scratch resistance by up to ten times, while also providing surface hydrophobicity and water resistance to the product. The durability of the product is increased, and the aesthetics of the material is maintained over time.





Calyshield™ L

Self-lubricating microcapsules product range

Our Calyshield product range exist in:

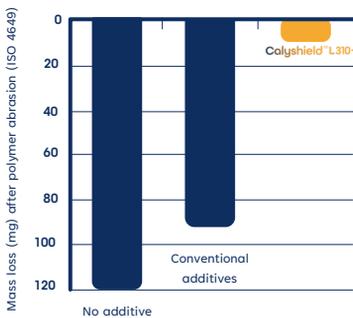
Calyshield™ L110

Calyshield™ L

Calyshield™ L310

1 - Outstanding Abrasion and Wear Resistance

Polymer mass loss upon abrasion; results after aging (1year)

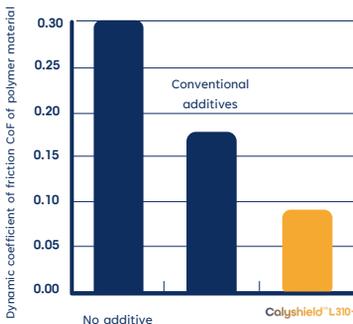


The Calyshield L grades improve abrasion and scratch resistance of polymers and coatings. Even just small additions of Calyshield L310 lead to an improvement of up to 10x in desirable mechanical matrix or the coating.

10x

2 - Outstanding Surface Lubricity and Water Resistance

Reduction in coefficient of friction with addition of additives



External analyses show that adding Calyshield L310 even at a friction of the polymer matrix when compared to a polymer without additives.

>65% Improvement of Surface Lubricity
Improvement of Water Resistance



Calyshield™ L

3 - Maintain aesthetics during the lifetime of the material

No Additive-



Calyshield™ L



Calyshield™ L grades provide a multitude of benefits

- ✓ Provide up to 10x abrasion and scratch resistance
- ✓ Create a lubricating surface for improved water resistance
- ✓ Maintain the aesthetics of the surface during use



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