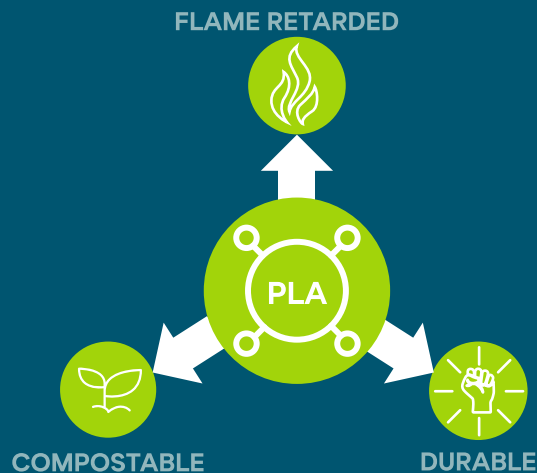





We have a globally patented award winning technology for **HIGH PERFORMANCE** renewable materials



## Our Low Carbon Grades:

Grade	Applications	Features	Benefits
 <b>Floreon Dura -Tech</b> Durable Grade	Injection Moulding Extrusion 3D Printing  Toys, durable applications not requiring fire resistance	High impact strength High HDT High renewable content (85% + by mass of polymer)	Suitable for demanding applications requiring the toughness and durability of ABS.  Reduced carbon footprint over ABS and derived from renewable feedstock
Grade	Applications	Features	Benefits
 <b>Floreon Therma -Tech</b> Flame Retarded Grade	Injection Moulding Extrusion 3D Printing  Electronics and Electricals, home appliances, plug casings	High Impact Strength High HDT Flame Retarded (UL94V-0) High renewable content (85% + by mass of polymer)	Developed for applications requiring fire resistance. Durability comparable to flame retarded ABS
Grade	Applications	Features	Benefits
 <b>Floreon Bio -Tech</b> Compostable Grade	Injection Moulding Extrusion 3D Printing  Horticulture and disposable items	High renewable content (85% + by mass of polymer) Industrially compostable	Low carbon footprint, multiple end of life options

# Floreon Launches breakthrough PLANT-BASED plastic for Consumer Electronics



FLAME  
RETARDANT

HALOGEN  
FREE

Floreon is redefining the capabilities of plant-based plastic (PLA) by developing its world-first **flame retardant technology**. Certified for use with electrical white goods appliances, the halogen-free flame retardant PLA is a significant breakthrough for the consumer electronics industry.

## Meeting a consumer need

In Floreon's consumer study, **91%** of UK adults said they would buy a white goods appliance made with plant-based plastic components. Floreon has been working hard to create a commercially viable formulation that meets this need. Thanks to its flame retardant plant-based plastic, global consumer electronic brands can bring such innovation to the market.

## Working collaboratively with Clariant

The flame retardant plant-based plastic was developed in collaboration with additive expert Clariant. Managing Director of Floreon, Shaun Chatterton said:

“To collaborate with a world-leading additives business and produce an innovative solution for global electrical household brands is a pioneering move forward in white goods sustainability. It is an exciting culmination of a decade of development.”

## Redefining plant-based plastic (PLA)

Without Floreon's additive expertise, PLA is a brittle material that has prevented brands from taking advantage of its low carbon footprint in the past. Floreon is now bringing a plant-based plastic with all the same performance qualities as commonly used plastics, but with the added environmental benefits of deriving from renewable resources.

## Floreon seeks first movers for plant based alternative to ABS plastic

The successful addition of a halogen-free flame retardant to Floreon's plant-based plastic enables major brands to lower their material carbon footprint by switching to a low carbon and renewable alternative to common plastics used today.

Manuel Mueller from Clariant commented:

“We recognise Floreon as leaders in plant-based plastic development. The company is an important collaborative partner for Clariant's sustainability development, allowing us to create leading-edge, innovative solutions together.”

Ideal applications include the rigid plastic casings for phone chargers, which need to be fire resistant for safety reasons.



# Floreon Application Highlight: Vacuums and Home Cleaning



FLAME  
RETARDANT

HALOGEN  
FREE

Floreon is a PLA based compound with enhanced durability and toughness.

By incorporating our halogen-free flame retardant element

 **Floreon** Therma-Tech it becomes perfect for electrical applications.

## MATERIAL SUBSTITUTION POTENTIAL:

PP and ABS

## COMPONENTS:

External Casing  
Product Tools  
Rigid Plug Casing  
Charger Unit

## Material

## Carbon Footprint (CO2eq/kg plastic)\*

ABS

3.8

PP

1.6

PLA

0.6

## FLOREON FEATURES:



Certified **Fire Resistance**  
Certified **Renewable Content**  
**Low Carbon Footprint**  
**Halogen Free**

## BENEFITS:



- Improved **sustainability** characteristics
- **Safe** and **functional** material
- **Long lasting** and **durable**
- Helps brands meet **sustainability commitments**



\*Reference: Vink & Davies 2014

# Floreon Application Highlight: Storage Organiser



**DURABLE  
GRADE**

Floreon is a PLA based compound with enhanced durability and toughness.

This makes  **Floreon** Dura-Tech ideal for rigid applications such as containers and storage boxes.

## MATERIAL SUBSTITUTION POTENTIAL:

PP and ABS

## COMPONENTS:

Body

Lid

Internal Separators

Material	Carbon Footprint (CO2eq/kg plastic)*
ABS	3.8
PP	1.6
PLA	0.6

## FLOREON FEATURES:



Certified **Renewable Content**  
**Low Carbon Footprint**

## BENEFITS:

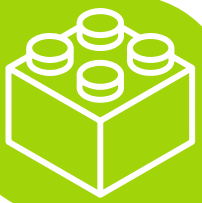


- Improved **sustainability** characteristics
- **Safe** and **functional** material
- **Long lasting** and **durable**
- Helps brands meet **sustainability commitments**



\*Reference: Vink & Davies 2014

# Floreon Application Highlight: Toys



**DURABLE  
GRADE**

Floreon is a plant-based plastic that is ideal for toys and other applications requiring **safety** and **durability**.

 **Floreon** Dura-Tech offers the mouldability of plastics but with the added benefits of **renewability** and a **low carbon footprint**.

## MATERIAL SUBSTITUTION POTENTIAL:

PP and ABS

## COMPONENTS:

Entire construction of toys



Material	Carbon Footprint (CO2eq/kg plastic)*
ABS	3.8
PP	1.6
PLA	0.6

## FLOREON FEATURES:



Certified **Renewable Content**  
**Low Carbon Footprint**  
**Safe, Non-Toxic**  
**Durable**



## BENEFITS:

- Improved **sustainability** characteristics
- **Safe** and **functional** material
- **Long lasting** and **durable**
- Helps brands meet **sustainability commitments**



\*Reference: Vink & Davies 2014