

First choice in materials for:

# packaging



specialist material for

Food | Medical | General Purpose | Cosmetics



## about VitasheetGroup

VitasheetGroup is Europe's largest manufacturer of custom-made extruded plastic sheet and films.

Combining the strengths of eight separate European companies - Carolex, Axipack, Metzeler Plastics, VTS Royalite UK, Royalite Italy, VTS Gaillon, Esbjerg Thermoplast and Iroplastics, into one, VitasheetGroup leverages over 50 years of experience to produce high quality materials used in a wide variety of industries, including specialist markets of transport, construction and industrial, packaging and graphic arts industries.

Manufactured from its current base of 8 production sites, VitasheetGroup offers the most extensive product range in Europe. Packaged under the brands of ViPrint™, ViSpec™ and ViForm™, customers are offered an unparalleled choice of materials which includes ABS, PP, PE, PS, PET, PMMA/ABS, and PP monofilaments.

VitasheetGroup's close proximity to its customers and their markets across Europe, facilitates the provision of fast and flexible made-to-measure solutions.

### Specialists in Packaging

VitasheetGroup specialises in the production of extruded sheets and films for food, medical, cosmetic and general-purpose packaging.

Manufactured under the ViForm™ brand, VitasheetGroup's range of packaging products have been engineered to meet the protective demands of most packaging applications, offering outstanding mechanical performance qualities, good temperature and impact resistance, rigidity, gloss and clarity.

ViForm™ materials are manufactured in a wide range of plastics, including extruded, co-extruded and laminated sheets and films made from PET, PS, ABS, PP and PE. Our materials are easily processed and are recyclable.

In addition to our standard range of products, VitasheetGroup can provide tailored material, specific to your packaging requirements. Many of the products in the ViForm™ range are used in applications that require strict manufacturing guidelines meeting the certification requirements for hygiene and safety by the food and medical industry.

### ViForm™ Range Summary

Range Name	Description	Features	Dimensions Thickness/Width
ViForm™ 2000	Polyethylene rolls, with low temperature properties, very good foldability and excellent resistance to stress whitening.	- Good Impact resistance - Excellent low temperature performance - Excellent chemical resistance	0.40 - 1.20mm / 300 - 1200mm
ViForm™ 3000	A range of polypropylene rolls offering good chemical resistance with a solid temperature performance and impact strength and excellent clarity.	- High clarity / transparency - Good impact resistance - Excellent high temperature performance - Excellent chemical resistance	0.40 - 1.20mm / 300 - 1200mm
ViForm™ 5000	A wide range of polystyrene rolls, easy to thermoform to meet the various requirement of many packaging applications.	- Good stiffness - Excellent formability - Excellent handling properties including welding, gluing, sealing, printing and cutting	0.20 - 2.30mm / 300 - 1200mm
ViForm™ 6000	Easily thermoformable ABS sheets and rolls offering excellent impact resistance and high rigidity.	- Excellent impact resistance - Good stiffness - Excellent formability and printability - Good impact and chemical resistance	0.25 - 2.00mm / 300 - 1000mm
ViForm™ Clear	A range of very clear PET rolls (APET and PETG) offering high transparency and stiffness.	- Excellent stiffness - Excellent transparency - Excellent printability - Good formability - HF Sealable	0.20 - 1.50mm / 300 - 1200mm

\* All Dimensions shown are a guide only, wider dimensions available on request

### Why VitasheetGroup?

#### WIDE RANGE OF MATERIALS

VitasheetGroup has developed a reputation in the packaging industry for supplying a wide range of high grade materials using specifically developed formulations for the most demanding of thermoforming and packing equipment applications.

#### QUALITY ASSURANCE

Central to our activities is our Total Quality program. All our facilities are ISO 9001 certified and our Carolex site, specialized in PS and PET for packaging, is also BRC/loP certified.

#### SERVICE

Combining product quality and service flexibility VitasheetGroup accommodates customer demands, by offering custom manufactured material solutions with fast and flexible lead-times.

#### INNOVATION

VitasheetGroup is continuously developing new materials to meet the latest market requirements and technical evolution in packaging industry. Our R&D center in Jülich, Germany brings its technical expertise and its pilot line while material testings in partnership with machine manufacturers allows us to offer turn key solution.

#### ENVIRONMENT

An important part of the company vision has always been to respect the environment. Our long standing environmental policy at VitasheetGroup focuses not only on the reduction of energy consumption and waste generation across each of our sites, but it also supports the development of new recyclable and renewable material solutions. For example, to support our customers to meet their own green agenda, VitasheetGroup has developed a range of environmentally friendly material solutions manufactured from recycled resources, including new food grade PET materials made from post consumer waste.

Properties	PE - ViForm™ 2000	PP - ViForm™ 3000	PS - ViForm™ 5000	ABS - ViForm™ 6000	PET - ViForm™ Clear
Impact Resistance	5	4	3	4	3
Transparency	2	2	3	1	5
Stiffness	2	2	3	4	4
Formability	2	3	5	4	3 (GPET 4)
Sealability	2	2	4	3	3 (GPET 4)
Printability	3	4	4	4	4
High Temperature	3	5	3	3	2
Chemical	4	4	2	3	3

1 = Low, 5 = High

Availability	PE - ViForm™ 2000	PP - ViForm™ 3000	PS - ViForm™ 5000	ABS - ViForm™ 6000	PET - ViForm™ Clear
Transparent		■	■ (5000)		■
Opaque	■	■	■	■	■
Finish	Smooth	Smooth	Matt/Gloss	Smooth	Gloss
Colour range	Yes	Yes	Yes	Yes	Yes
Theoretical density	0,93, 0,96	0,92	1,06	1,07	1,32 (GPET 1,26)
Thickness in (mm)					
Min	0,40	0,40	0,20	0,25	0,15
Max	1.20	1.20	2.30	2.00	1.50
Width* in (mm)					
Min	300	300	300	300	300
Max	1200	1200	1200	1200	1200
Roll Diameter** (mm)	Max 1000	1000	1000	1200	1000
Anti block Treatment					■
Recyclable	■	■	■	■	■
Food Approved	■	■	■		■
BRC/Iop Certificate			■		

\* Maximum Width is dependent on gauge \*\*or maximum weight is 1t

## food packaging



### Quality materials for food packaging

VitasheetGroup manufactures a wide range of film and sheet materials specifically for the food industry. Our range of ViForm™ products offer excellent properties suited to food packaging, including ease of processing, excellent transparency, high rigidity and outstanding chemical inertia.

These materials are all recyclable and are free of Chlorine, phthalates or BPA. They can be made with food-certified recycled material for more environmentally conscious solutions.

As well as the standard range of products, ViForm™ food packaging materials can be custom-made to suit individual requirements including:

- Coex material with recycled material including food-certified post-consumer recycled material
- Metal finishes
- Lamination with PE
- Microwave capability

### Applications

Our technical support team is continuously looking for creative new solutions for food packaging. Today we deliver materials for the following applications:

- Containers
- Food trays
- Lids
- Modified atmosphere packaging
- Clip-on lids
- Microwave oven containers and trays
- Blisters
- Disposables for the catering industry
- Transit trays
- Display packaging

### Hygiene and quality certification

Our manufacturing facility in France is certified according to the BRC/IoP (British Retail Consortium/Institute of Packaging) hygiene standard.

Specified ViForm™ materials meet the following standards:

- FDA 177.1630
- Food regulation (EU) 10/2011
- Toy : EN 71-3
- Heavy metal 94/62/CE

### Key Products for Food Packaging Applications\*

#### ViForm™ 5000 Range

- ViForm™ Krystal 5000
- ViForm™ High Impact 5100
- ViForm™ Dairy 5120
- ViForm™ Blend 5800
- ViForm™ HTE 5810

#### ViForm™ Clear Range

- ViForm™ Clear AGL 10
- ViForm™ Clear AGL 10 Water
- ViForm™ Clear AGL 10 Cx
- ViForm™ Clear rPET 10
- ViForm™ Clear Metal 10
- ViForm™ Clear AGL 90
- ViForm™ Clear rPET 90

\* This list presents our main products for your applications; for more detailed requests, please consult our sales office; see contact details at the back of this brochure.

ViForm™ sheet and film materials used for manufacturing food packaging, meet the certification requirements for hygiene and safety outlined by the food industry.



## medical packaging



### Reliable material for medical packaging

The ViForm™ Clear MDL film range from VitasheetGroup is especially developed for medical packaging. Able to withstand e.beam, radiation and gas sterilisation, this range of films offer a safe and reliable solution.

Key features of ViForm™ Clear MDL film range includes:

- ▶ Excellent transparency
- ▶ Good processing characteristics
- ▶ Excellent control of external anti-block deposit
- ▶ High rigidity
- ▶ Good mechanical resistance
- ▶ Sterilizable by radiation and by ethylene oxide
- ▶ Dust free production and high level of traceability
- ▶ Environment friendly (recyclable no Chlorine, phthalates or BPA)

### Applications

ViForm™ Clear MDL films have been specially developed for the packaging of medical devices such as catheters, filters for body fluid, injection devices and implants. These films can be sterilized and will offer protection for a wide range of applications, including:

- ▶ Containers
- ▶ Trays
- ▶ Implants blisters
- ▶ Transit trays

### Hygiene certification and dust free

In the medical industry VitasheetGroup supplies sheet and film materials that meet the very stringent demands on hygiene and safety. Our manufacturing facility in France is certified according to the BRC/IoP hygiene standard.

Moreover, one of the production lines operates in a dust free environment, where medical films are packaged according to sterile room requirements (for example: double film protection around the rolls, plastic cores and plugs).

Special identification labels allow the medical materials to be traced throughout the production process, including raw material lot numbers, with the option of adding customer specific references to these labels.

VitasheetGroup also offers two anti-blocking treatment options, one for surface treatments and the other as an internal treatment by means of an additive that migrates to the surface.

Our MDL films can be provided on request with USP class VI certification.

### Key Products for Medical Packaging Applications\*

#### ViForm™ 5000 Range

- ViForm™ Pharma 5180

#### ViForm™ Clear Range

- ViForm™ Clear MDL 50
- ViForm™ Clear MDL 656
- ViForm™ Clear MDL 60
- ViForm™ Clear MDL 100

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## general purpose packaging



### Performance materials for general packaging

ViForm™ materials are manufactured to satisfy the quality standards of the packaging industry. Available as a standard solution or tailored to meet specific customer requirements, the following key features are available:

- ▶ Excellent transparency
- ▶ Incorporation of recycled material
- ▶ Good processability
- ▶ Deliverable in opaque films
- ▶ Outstanding chemical inertia
- ▶ Reduced shrinkage characteristics for FFS packaging
- ▶ High rigidity
- ▶ Good mechanical resistance
- ▶ Environment friendly (recyclable - no Chlorine, phtalates or BPA)

### Applications

ViForm™ materials are used in a wide range of non-food packaging applications including blisters and conductive trays for electronic components. In particular customers can find a wide range of APET and PETG thermoformable films to meet various requirements including on line packaging on Form Fill Seal (FFS) machines or HF sealing.

Common applications include:

- ▶ Containers
- ▶ Blisters
- ▶ Handling trays
- ▶ Transit trays

### Technical Support

Understanding the importance of strategic partnerships, VitasheetGroup works closely with some of the packaging industries leading machine manufacturers to develop the best technical solutions that will guarantee the highest processing speed on a line.

In particular, for FFS applications or HF sealing we also offer technical support and a range of quality products for those customers wanting to transition from PVC packaging to an environmentally friendly PET solution.

### Key Products for General Packaging Applications\*

#### ViForm™ 2000 Range

- ViForm™ HD 2100
- ViForm™ LD 2200

#### ViForm™ 3000 Range

- ViForm™ PPC 3100

#### ViForm™ 5000 Range

- ViForm™ High Impact 5100
- ViForm™ AntiStatic 5150
- ViForm™ Dissipative 5160
- ViForm™ Conductive 5175
- ViForm™ Eco 5400

#### ViForm™ 6000 Range

- ViForm™ High Impact 6100
- ViForm™ Eco 6400

#### ViForm™ Clear Range

- ViForm™ Clear BLS 30
- ViForm™ Clear BLS 30 Eco
- ViForm™ Clear BLS 434
- ViForm™ Clear BLS 40
- ViForm™ Clear BLS 40 Eco
- ViForm™ Clear BLS 80 Eco
- ViForm™ Clear rPET 30

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## cosmetic packaging



Stylish and elegant materials for cosmetic packaging

ViForm™ sheet and films have been developed to meet the very specific demands of the premium beauty and luxury packaging markets. Available in a variety of transparent, tinted or decorated finishes, ViForm™ films not only look good but are manufactured with a high level of durability, to help withstand the impacts of transportation, store display and the logistics systems in manufacturing facilities. ViForm™ films are the elite packaging choice for the cosmetic industry.

Key material properties include:

- Super clear transparency
- Availability of a wide range of colours and finishes
- Excellent aspect standards
- Environment friendly (recyclable - no Chlorine)

In addition to our standard range of products, VitasheetGroup supplies multi-layer products that are co-extruded or laminated. For customers searching for something different or after an environmentally friendly solution, we have the tools and expertise to help customers develop new and innovative materials suited to their requirements.

### Applications

ViForm™ materials are used in the following applications:

- Trays
- Displays
- Blisters
- Boxes

### Fast response and short lead-times

VitasheetGroup is focused on delivering a high level of service to the packaging industry demonstrating flexibility and short lead times. VitasheetGroup is Europe's largest producer of custom-made extruded sheet and films and we have a presence throughout Europe to ensure we can offer our customers local support. Moreover, as a multi-site operator, we have the capability to manufacture close to our customers, yet offer a wide range of specialist expertise and products.

### Key Products for Cosmetic Packaging Applications\*

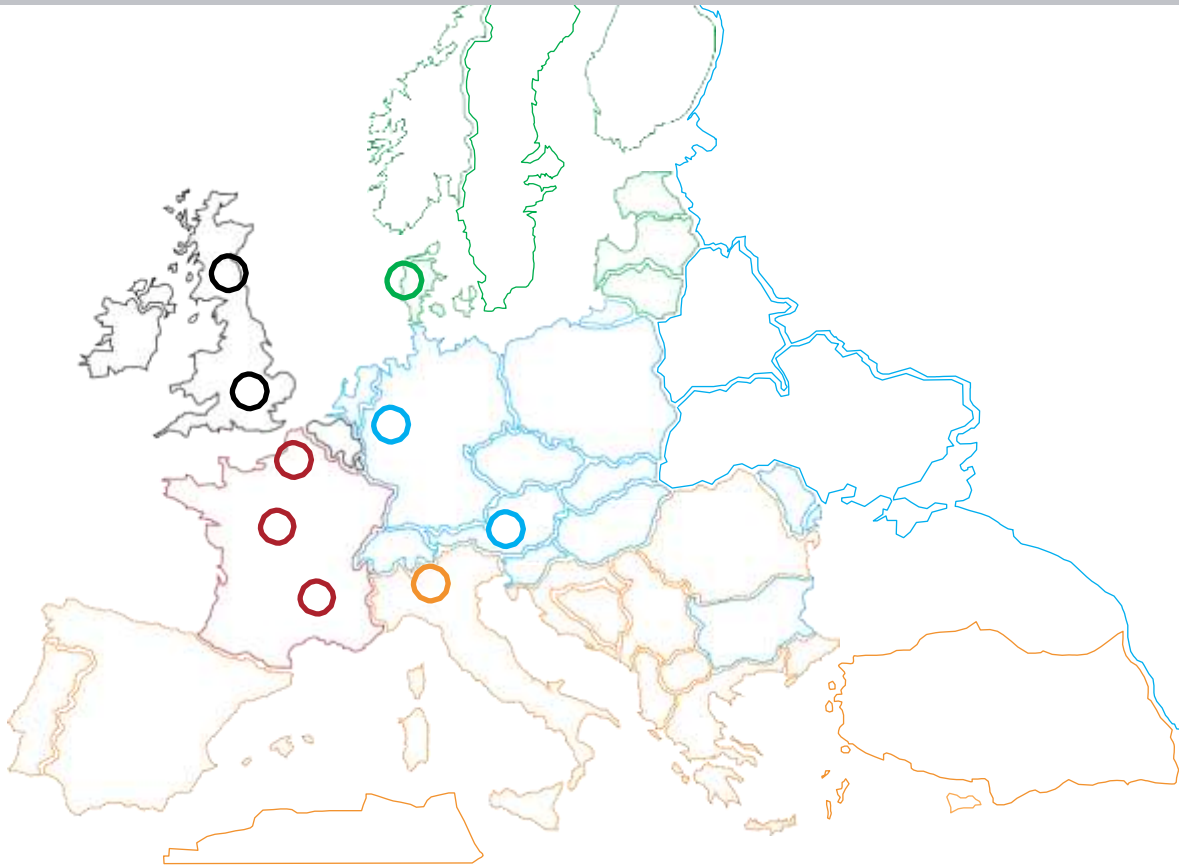
#### ViForm™ 5000 Range

- ViForm™ High Impact 5100
- ViForm™ CST 5140
- ViForm™ Décor 5190

#### ViForm™ Clear Range

- ViForm™ Clear CST 10
- ViForm™ Clear CST 30
- ViForm™ Clear AGL 10
- ViForm™ Clear BLS 30
- ViForm™ Clear BLS 434
- ViForm™ Clear BLS 40

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FOR MORE INFORMATION, PLEASE CONTACT YOUR LOCAL SALES TEAM:



#### Austria

Tel: +43 (0) 7675 35 50  
Fax: +43 (0) 7675 35 50 14  
info@vitasheetgroup.at

#### Longué-Jumelle

Tel: +33 (0) 2 41 52 61 82  
Fax: +33 (0) 2 41 38 80 85  
packaging@vitasheetgroup.fr



#### Italy

Tel: +39 02 97 23 61  
Fax: +39 02 97236 257  
sales@vitasheetgroup.it



#### Denmark

Tel: +45 75 29 19 00  
Fax: +45 75 29 19 22  
sales@vitasheetgroup.dk

#### Ruitz

Tel: +33 (0) 3 21 61 66 66  
Fax: +33 (0) 3 21 61 66 60  
graphic.arts@vitasheetgroup.fr



#### United Kingdom

Tel: +44 (0) 131 333 3369  
Fax: +44 (0) 131 333 5161  
info@vitasheetgroup.co.uk



#### France

St Georges de Reneins  
Tel: +33 (0) 4 74 67 79 10  
Fax: +33 (0) 4 74 67 62 00  
info@vitasheetgroup.fr



#### Germany

Tel: +49 (0) 2 461 64 0  
Fax: +49 (0) 2 461 64 210  
info@vitasheetgroup.de

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