

Food Grade Materials



Engineering Plastic Stock Shapes for the Food Industry

compliant to European Union Regulation (EU) 10/2011



Certified Plastic Materials for Safe and Cost-effective Production

Trends in food processing & packaging

The efficiency in production and the quality of products has considerably improved in the food industry in recent years. Newly developed high performance engineering plastics have made significant contribution to this. In modern food production systems, plastic products support essential process steps such as processing, handling, conserving, packing and storing. Consumers already benefit from these improved processes and rightfully expect the highest possible safety standards in the production of food and beverage products. Trends such as global raw material imports, differences in control rules and incomplete legislation negatively influence the quality assurance in these sensitive sectors.

European Union Regulation (EU) 10/2011 enables production safety

Historically, for plastics in direct contact with food products a harmonized European legislation had been valid for about ten years and was implemented nationally by the member states, thus enabling common standards: the Directive 2002/72/EC.

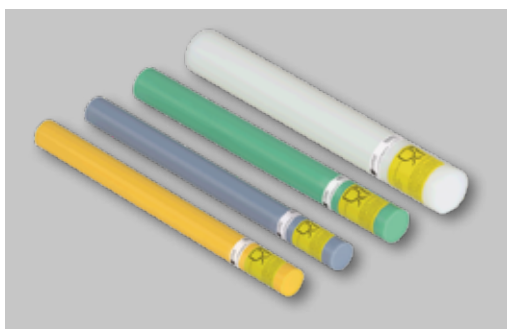
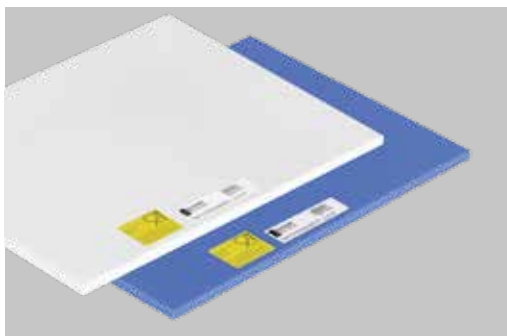
To better monitor the processes in future, European legislation has made changes in the regulations for safety in food production. Since May 2011 these apply to all European Union member states. They replace the Directive 2002/72/EC and are summarised under the new Regulation (EU) 10/2011. FDA approvals are not affected by the new regulation and remain unchanged.



Mitsubishi Chemical Advanced Materials' Food Grade Materials provide certification on highest safety level

Addressing to the very high quality and safety standards in the food industry Mitsubishi Chemical Advanced Materials has updated its range of Food Grade plastics according to Regulation (EU) 10/2011: all Food Grade products are processed and handled according to this regulation and to the guidelines of GMP (Good Manufacturing Practice).

Every delivery is accompanied by a Declaration of Compliance with the Order (DCO) - full traceability guaranteed – and a Declaration of Compliance (DoC) according to the Food Regulation (EU) 10/2011. Customers get a wide selection of products and design possibilities to reach the best possible cost-performance-ratio. Furthermore Mitsubishi Chemical Advanced Materials provides help for migration calculation.



Good Manufacturing Practice (GMP)

Mitsubishi Chemical Advanced Materials produces semi-finished stock shapes and manufactures customised finished parts according to the guidelines of GMP.

These guidelines are part of a quality system covering the manufacture and testing of food products.

GMP guidelines guarantee highest quality standards of our Food Grade products.

Complete documentation from choice of raw material to finished parts allows full traceability and supports your own product control efforts.

Declaration of Compliance

Mitsubishi Chemical Advanced Materials is constantly developing product and application solutions that help you improve your production performance – today and in future.

Our Food Grade programme fulfils the documentation requirements that are valid since 2016. Every delivery is accompanied by a

Declaration of Compliance according to Regulation (EU) 10/2011

which is a further development of Directive 2002/72/EC for plastic materials in contact with food and includes much stricter test conditions for migration.

Declaration of Compliance with the Order guarantees traceability

The Declaration of Compliance with the Order ensures the uninterrupted traceability of the plastic product from the stock shape back to the raw material used by batch. At Mitsubishi Chemical Advanced Materials each production step is reliably tested and documented. This traceability is required by law for modern food processing. Each product is marked with material type, production lot and size. Each delivery comes along with a Declaration of Compliance with the Order according to EN 10204-2.2



TVNAT PL UV1000 50x1Mx2M PLN E



03000110279

Lot 8475105

Customer Benefits

- **Broadest portfolio of certified Food Grades**

Food processors profit from the broadest portfolio from PE up to PEEK materials and best established know-how in the industry. Mitsubishi Chemical Advanced Materials constantly works on innovation of specialised engineering plastics. Our offering contains special developments like Metal Detectable or Antistatic materials and is an ongoing process in close cooperation with our customers.

- **Product safety through Good Manufacturing Practice (GMP)**

Product safety for you: All shapes and finished parts made from Mitsubishi Chemical Advanced Materials Food Grades are produced according to most modern production standards including consistent quality control (GMP).

- **Declaration of Compliance**

Every delivery is accompanied by a Declaration of Compliance according to latest regulation status. This declaration considerably reduces your own in-house testing time and costs. Mitsubishi Chemical Advanced Materials provides the declaration including the complete test conditions.

- **Material selection and application consulting**

Customers benefit from Mitsubishi Chemical Advanced Materials international partner network that helps OEMs select the right material for their application. Our application advice considers the individual type of

food that gets into contact with the plastic parts. Consulting is based on temperature and food contact time of your individual application.

- **Migration calculation support**

Migration = Out-leaching of substances from solid contact material into the food stuff.

Product safety on all stock shapes: The independent, external laboratory INTERTEK has tested the migration values of all Mitsubishi Chemical Advanced Materials Food Grades. These tests were performed according to regulation (EU) 10/2011. Their results are stated in our Declaration of Compliance. Your own calculation of the migration value in your individual application becomes very easy with the help of these pre-tested values.

The migration tests on our Food Grades include testing per OML and SML guidelines:
OML = Overall Migration Limit: measures the inertness of a material
SML = Specific Migration Limit: proves the toxicological evaluation of individual substances

Mitsubishi Chemical Advanced Materials, however, can only offer calculation support and give material recommendations. The final choice of material used in a specific application is the customer's own responsibility.

- **Stock Availability**

We offer a wide range of standard and sub-standard formats, most of them available from stock. Please consult us for further details.



More than 30 Food Grade Products from Mitsubishi Chemical Advanced Materials – More than 30 options for your successful production process

Stock Shapes	Base Polymer	DoC 1935/2004 acc. to (EU) 10/2011 Food Grade (1)	FDA compliant (2)
Ketron® 1000 PEEK natural	PEEK	+	+
Ketron® 1000 PEEK black	PEEK	+	+
Ketron® TX PEEK blue	PEEK	+	+
Ketron® MD PEEK blue	PEEK	+	+
Techtron® 1000 PPS natural	PPS	NT	+
Techtron® HPV PPS blue	PPS	+	+
Sultron™	PPSU	+	+
Sultron™ PSU natural	PSU	NT	+
Duratron® U1000 PEI natural	PEI	NT	+
Fluorosint® 207 white	PTFE	-	+
Fluorosint® HPV tan	PTFE	NT	+
Ertacetal® C LQ natural	POM-C	+	+
Ertalon® 6 SA natural	PA 6	+	+
Ertalon® 66 SA natural	PA 66	+	+
Ertalon® 6 PLA natural / blue	PA 6	+ / +	+ / +
Nylatron® MD blue	PA 6	+	+
Ertacetal® C natural / blue / black	POM-C	+ / + / +	+ / + / +
Ertacetal® C - other colours	POM-C	NT	+
Acetron® MD blue	POM-C	+	+
Ertalyte® natural / black	PET	+ / +	+ / +
Ertalyte® TX pale grey	PET	+	+
TIVAR® 1000 natural / blue 7020 / green 3010 / green 3060 / red 2030 / yellow 6030	PE-UHMW	+ / + / + / + / + / +	+ / + / + / + / + / +
TIVAR® 1000 antistatic black	PE-UHMW	+	-
TIVAR® DS yellow	PE-UHMW	+	+
TIVAR® Cestidur, grey	PE-UHMW	+	+
TIVAR® H.O.T. white	PE-UHMW	+	+
TIVAR® CleanStat black	PE-UHMW	+	+
TIVAR® 1000 ASTL black	PE-UHMW	+	-
TIVAR® 1000 EC black	PE-UHMW	+	+
TIVAR® MD blue	PE-UHMW	+	+
TIVAR® OilFilled grey	PE-UHMW	NT	+
TIVAR® CleanStat White	PE-UHMW	-	+
TIVAR® HPV blue	PE-UHMW	+	+
PE 500 natural / blue 7020 / green 3060 / red 2025 / yellow 6030	PE-HMW	+ / + / IT / + / +	+ / + / + / + / +

+ Complies with the requirements of the regulations.

- Does not comply with the requirements of the regulations.

NT Has not been tested according to the requirements of the regulations.

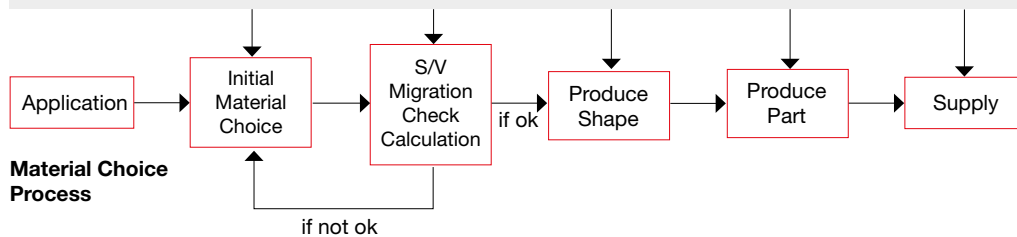
IT Tests according to the requirements of the regulations are on-going

[1] Food Grade: Mitsubishi Chemical Advanced Materials' European new "Food Grade" designated products comply with the requirements mentioned in the Regulation [EC] No 1935/2004 and the Regulation (EU) 10/2011. Further our "Food Grade" products are manufactured according to Good Manufacturing Practice [GMP] as set out in Regulation [EC] No 2023/2006.

[2] This column gives the compliance of the raw materials used for the manufacture of the Mitsubishi Chemical Advanced Materials Stock Shapes with respect to their composition as set out in the United States of America (FDA) for plastic materials and articles intended to come into contact with foodstuffs.

Mitsubishi Chemical Advanced Materials support at all stages:

- Broadest material range
- Local experts
- S/V migration assistance
- GMP checked ✓
- Full traceability
- GMP checked ✓
- DCO
- DoC



Mitsubishi Chemical Advanced Materials

Europe

Mitsubishi Chemical Advanced Materials Europe NV
 Galgenveldstraat 12
 8700 Tielt, Belgium
 T +32[0] 51 42 35 11
 F +32[0] 51 42 33 10
 contact@mcam.com

North America

Mitsubishi Chemical Advanced Materials Inc.
 2120 Fairmont Avenue
 PO Box 14235 - Reading, PA 19612-4235
 T 800 366 0300 | +1 610 320 6600
 F 800 366 0301 | +1 610 320 6638
 contact@mcam.com

Asia-Pacific

Mitsubishi Chemical Advanced Materials Asia Pacific Ltd.
 Unit 7B, 35/F, Cable TV Tower,
 9 Hoi Shing Road, Tsuen Wan, Hong Kong
 T +852 2470 26 83
 F +852 2478 99 66
 contact@mcam.com

Belgium | Brazil | China | France | Germany | Hong Kong | Hungary | India | Italy | Japan | Korea | Mexico | Poland | South Africa | Switzerland | The Netherlands | United Kingdom | United States of America

All statements, technical information and recommendations contained in this publication are presented in good faith and are, as a rule, based upon tests and such tests are believed to be reliable and practical field experience. The reader, however, is cautioned that Mitsubishi Chemical Advanced Materials does not guarantee the accuracy or completeness of this information and it is the customer's responsibility to determine the suitability of the products of Mitsubishi Chemical Advanced Materials in any given application.

Acetron®, Duratron®, Ertacetal®, Ertalon®, Ertalyte®, Fluorosint®, Ketron®, Nylatron®, Sultron™, Techtron®, TIVAR® are registered trademarks of the Mitsubishi Chemical Advanced Materials group of companies.

Follow us



@MCAMconnect

Distributed by:

