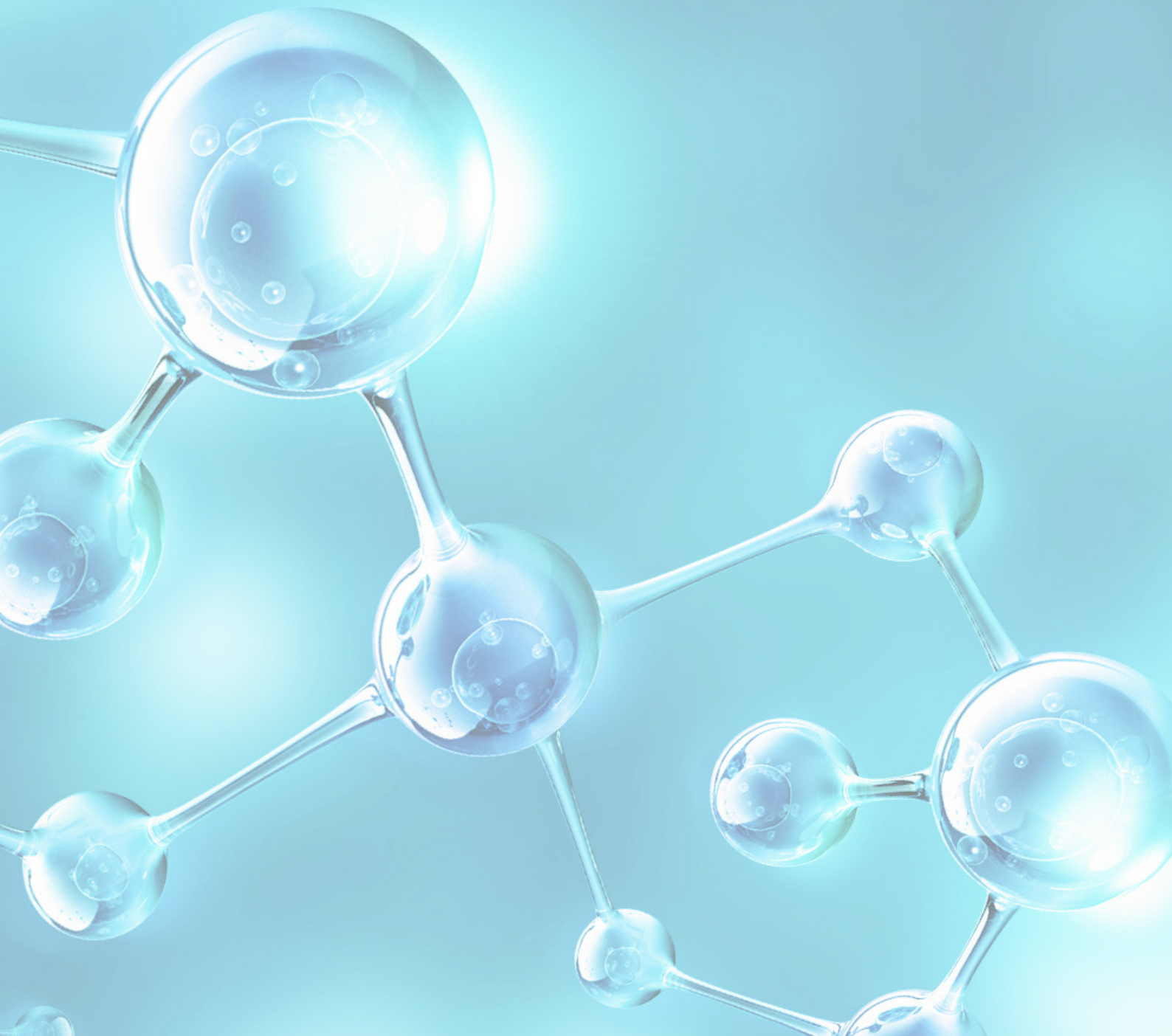
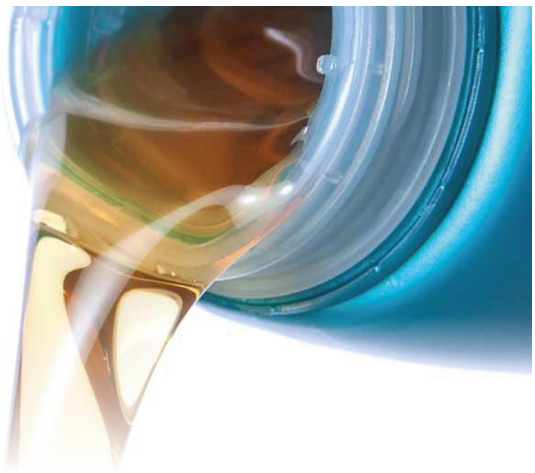
Resins
FoodContact



POLYNT COMPOSITES

One of the global leader for thermoset composites



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Production Sites

EMEA

Polynt Composites Poland Sp. z o.o.

Polynt Composites Spain, S.L.U.

Polynt SpA - San Giovanni Valdarno (Italy)

Polynt Group

After the merger with Reichhold on May 2017 the new Polynt Group is a global Company in the Intermediates, Coating and Composite Resins, Thermoset Compounds, Gel-coats and niche Specialties.

This combination enhances the Group's leading position as a global vertically integrated specialty chemicals player, with significant global presence in Europe, North America and Asia, a strategy initiated by Polynt with the successful integration of PCCR and CCP in the last years and now further reinforced by Reichhold's global scale, extensive product portfolio and R&D competencies.

Polynt Group is known for its superior quality and impressive range of products and with its excellent distribution network it can provide first-class service to customers whatever their market. Customer Service and Technical Service teams are renowned for their customer focus, offering the best service even after products have left manufacturing.

The Group strives to keep customers satisfied, assisting them in producing premium quality products every time they use its products.

Product innovation is important for the Group's business and it's the reason for which it constantly works with customers to find solutions to problems.

Introducing new or improved products ensures that Polynt Group continue not only to deliver what the market wants and needs, but also when it is wanted and needed.

Food Contact European Regulation

The range of Polynt unsaturated polyester resins includes, among others, a group of resins that meet the Commission Regulation (EU) No. 10/2011 issued on 14 January 2011 concerning plastic materials and articles intended to come into contact with foodstuffs.

These resins are:

- prepared with raw materials and additives listed in Annex 1 of Regulation (EU) No. 10/2011 and, consequently, complying with this regulation
- produced in factories that adopt good manufacturing practices (GMP).

The development and continuous alignment of this product line to the ever changing regulations places Polynt Group among the market leaders of this growing segment.

Composites materials inherent benefits have boosted this market segment growth by providing end users with cost competitive, lightweight, strong and durable articles. Weight saving associated with Composites solutions leads to lower energy consumption and reduced carbon dioxide emissions thus offering more sustainable products throughout their entire life cycle.

Polynt has dedicated a team of experts to continuously monitor the evolution of the complex food contact European legislation in order to quickly adjust the product line to the new regulatory requirements. Here we provide a synthesis of current status.

Regulation (EC) No. 1935/2004

The Regulation (EC) No. 1935/2004 by the European Parliament and the Council of 27 October 2004 represents the framework regulation that establishes general requirements to be met by all materials and articles intended to come into contact with foodstuffs, which are usually defined with the acronym FCMs (Food Contact Materials).
Article 1 of Regulation (EC) No. 1935/2004 defines that the scope applies not only to materials and articles that are intended to come into contact with foodstuffs or which are already in contact with foodstuffs but it extends its enforcement also to materials that can be reasonably expected to be brought into contact with food. For this reason, the application of Regulation (EC) No. 1935/2004 must be extended to other classes

of manufactured goods and articles that must be considered potential FCMs, such as laminates for the production of insulating panels for vans and trucks used for food transportation and agglomerates used to make kitchen countertops.

Article 3, General Requirements, of Regulation (EC) No. 1935/2004 states that FCMs must be manufactured in compliance with good manufacturing practices in order to prevent transfer of their constituents to food in quantities which could endanger human health, cause unacceptable change in foodstuffs composition or deteriorate their organoleptic characteristics.

Regulation (EC) No. 2023/2006

Good Manufacturing Practices (GMP) for materials and articles intended to come into contact with food are defined by Commission Regulation (EC) No. 2023/2006 of December 22, 2006. They have been applied to all sectors and to all stages of manufacture, processing and distribution of FCMs as of August 01, 2008.

The GMP states (Article 5, 6 and 7) that operators in these sector must establish, implement, enforce and maintain an effective, documented quality assurance system to make sure that the various operations must be carried out according to pre-established instructions and procedures which must be made available to the competent authorities.
Polynt Group factories manufacturing resins for the production of food contact plastics have established both system procedures and internal operating policies to ensure the correct application of GMPs. Company plant quality management systems are also certified according to ISO 9001: 2015.

Regulation (EU) No. 10/2011

Regulation (EU) No. 10/2011, like the previous Commission Directive 2002/72/EC issued on August 06, 2002, establishes specific rules for the manufacture and marketing of materials and articles exclusively made of plastics and intended to come into contact with food.

Article 4 of Regulation (EU) No. 10/2011 states that plastic materials and articles may be placed on the market if they comply with the relevant requirements set out in articles 3 (general requirements), 15 (labeling) and 17 (traceability) of Regulation (EC) No. 1935/2004, if they are manufactured in accordance with the GMP and if they comply with the declaration requirements (Article 15) and composition (Article 5) of the Regulation itself.

Regulation (EU) No. 10/2011 explains that plastic materials and articles shall not transfer their constituents to foodstuffs in quantities exceeding the specific migration limits (Article 11) and the overall migration (Article 12) indicated in Annex 1 of the same Regulation.

In Annex V, compliance testing, Regulation (EU) No. 10/2011 describes that the migration tests must be carried-out on the material or on the article or on a specimen taken from the material or the article or on a specimen representative of the material and article itself.

As a consequence, the manufacturer of the finished article is responsible to verify the limits of global and specific migration and therefore to check that the manufactured article complies with the current legislation.
Finally, Article 15 of Regulation (EU) No. 10/2011 defines how the declaration of compliance must be written.

Food Contact product range

Polynt Group's resins compliant with food contact regulation are identified with the letter «**F**» (it means «Food» and it is included in the nomenclature) and fit with the composition requirements described in Article 5 of Regulation (EU) No. 10/2011 that states that only the substances included in Annex 1 of the same Regulation may be intentionally used in the manufacture of plastic articles. All the starting monomers constituting the polymer, the reactive monomer and additives used to make resins suitable for contact with foodstuffs, are listed in Annex 1 of Regulation (EU) No. 10/2011.

In addition, Polynt Group resins suitable for food contact are produced according to the requirements of Good Manufacturing Practices (GMP) of materials and articles intended to come into contact with food products as required by the Regulation (EC) No. 2023/2006.

Polynt Group resins for food contact applications are manufactured at the facilities located in Miranda de Ebro (Spain), Niepolomice (Poland) and San Giovanni Valdarno (Italy) where specific procedures have been put in place to meet the requirements of European regulations concerning plastic materials and articles intended to come into contact with foodstuffs -Regulation (EC) No. 1935/2004, Regulation (EC) No. 2023/2006 and Regulation (EU) No. 10/2011.

Polynt Group resins for food contact applications have been developed for use in applications and transformation technologies normally used with polyester resins and are also available in thixotropic, accelerated, low styrene emission and improved UV resistance variants. We would like to remind that resin raw material compliance and adherence to GMP is not enough to authorize their use for food contact and that the manufacturer of composites articles based on such resins must verify that the methods applied for curing and post-curing are appropriate and that the article itself is tested and certified before use.

Following you can find a non-exhaustive list of Polynt Group resins suitable for the manufacturing of plastic materials and articles intended for contact with food products. This list is constantly evolving and further resins can be added upon market requests.

DISTITRON® 152 F - Isophthalic resin containing neopentyl glycol with excellent mechanical characteristics and high resistance to hydrolysis used for gelcoat production.

DISTITRON® 155 F - Isophthalic resin, type UP 3 according to DIN 18820-1, containing neopentyl glycol for hand lay-up and filament winding where high chemical and mechanical resistance characteristics are required.

DISTITRON® 167 FV6 - Highly flexible isophthalic resin for gelcoat production.

DISTITRON® 180 FV6 - High elongation isophthalic resin, type 1100 according to DIN 16946-2, for the manufacturing of internal liners for tanks and pipes by centrifugal casting.

DISTITRON® 183 F - Isophthalic resin for gelcoat production.

DISTITRON® 183 CAV5F - General purpose Isophthalic resin with good chemical resistance that can be used for gelcoat production.

DISTITRON® 429 FV1,3 - Low viscosity orthophthalic resin for injection.

DISTITRON® 1402 F - Medium reactivity orthophthalic resin for hand lay-up and spray-up.

DISTITRON® 1402 FNT - Medium reactivity, thixotropic and pre-accelerated orthophthalic resin for hand lay-up and spray-up.

DISTITRON® 1629 F - General purpose Isophthalic resin with high HDT and good chemical resistance for filament winding. Lloyd's and RINA certified.

DISTITRON® 1629 FAST - Thixotropic and pre-accelerated orthophthalic resin for hand lay-up and spray-up.

DISTITRON® 3519 FAST - Medium reactivity, thixotropic, pre-accelerated orthophthalic resin with UV stabilization for filament winding.

DISTITRON® 3559 FV3 - Orthophthalic resin with high thermal and mechanical characteristics suitable for filament winding technology.

DISTITRON® 3584 F - Pure maleic resin with high thermal performance used by hot molding.

DISTITRON® B 3613 F - Unsaturated monomer-free polyester resin used as a carrier resin of pigment and thickening pastes.

POLYNT 2571 WF - Medium reactivity orthophthalic resin for tanks and pipes production by filament winding. Type 1120 (DIN 16946-2), Type UP 0 (DIN 18820-1), Type UP 1A (EN 13121-1).

POLYNT 2572 WF - Medium reactivity orthophthalic resin for tanks and pipes production by filament winding. Type 1120 (DIN 16946-2), Type UP 0 (DIN 18820-1), Type UP 1A (EN 13121-1).

POLYNT 2772 WF - High reactivity orthophthalic resin, type 1120 according to DIN 16946-2, with high mechanical and thermal properties for tanks by filament winding.

POLYNT 2358 DF - Flexible orthophthalic resin for engineered stones by slabs technology.

POLYNT 2359 DF - Flexible orthophthalic resin for engineered stones by slabs technology.

POLYNT 2360 DF - Flexible orthophthalic resin for engineered stones by slabs technology.

POLYNT 2558 WF - Medium reactivity orthophthalic resin for tanks and pipes production by filament winding.

POLYNT 2975 MF - High reactivity orthophthalic resin for hot molding.

POLYNT 4350 WF - High elongation isophthalic resin, type 1100 according to DIN 16946-2, for the manufacturing of internal linerss for tanks, pipes by filament winding.

POLYNT 4665 GLF - Isophthalic resin, UV stabilized for gelcoat production.

POLYNT 5484 MF - Isophthalic resin containing neopentyl glycol with high stain resistance for trays production by hot molding.

NORSODYNE® 17192 F - Flexible orthophthalic resin, UV stabilized for engineered stones by slabs technology.

NORSODYNE® F 25233 - Medium reactivity orthophthalic resin for pipes and tanks production by hand-lay up or filament winding technologies.

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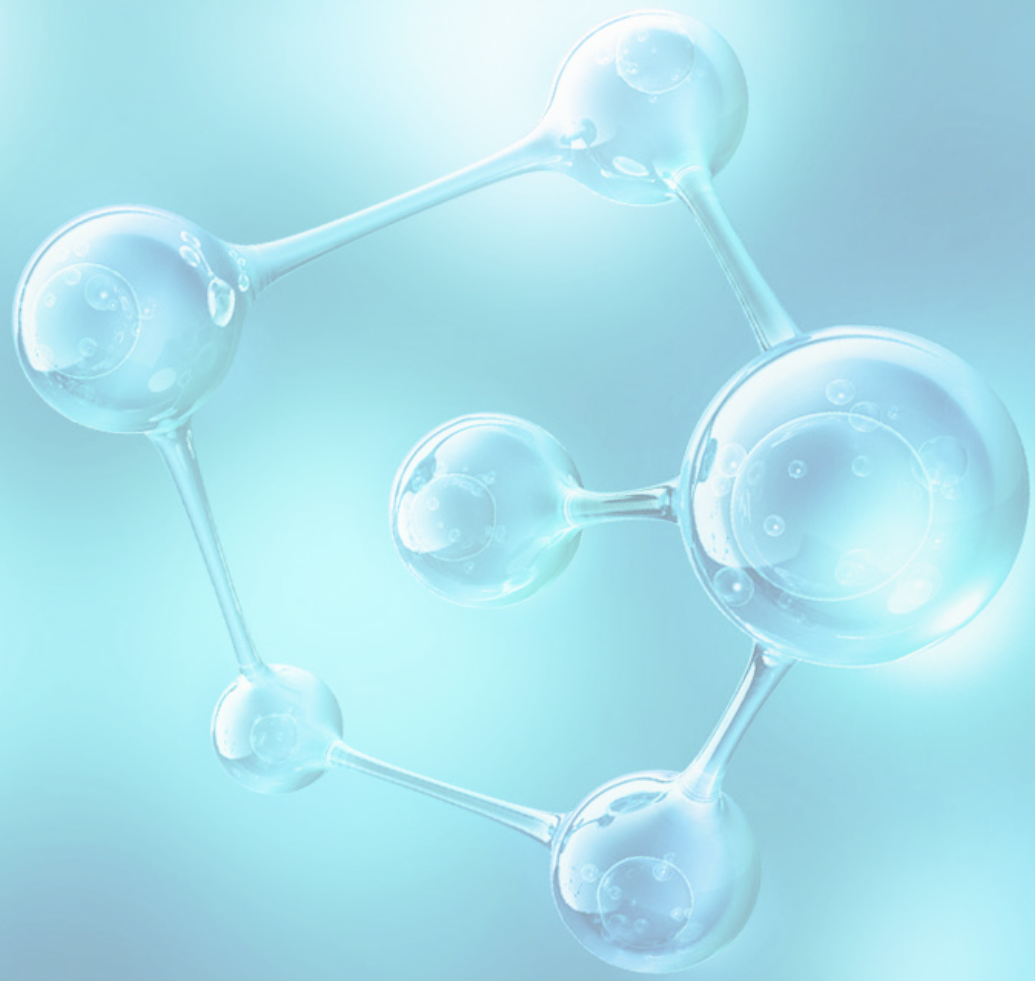

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