

Product Data Sheet



## AmberChrom™ CG161M Chromatography Resin

Chromatographic-grade Resin for Purification

Description AmberChrom<sup>™</sup> CG161M Chromatography Resin is a macroporous polymeric resin used for adsorption and reversed-phase liquid chromatography. AmberChrom<sup>™</sup> CG161M is specifically designed for the cost-effective, large-scale purification of proteins, peptides, nucleic acids, antibiotics, and small molecular weight pharmaceutical ingredients. The product is suitable for use in many pharmaceutical applications in front-end capture, downstream purification, and desalting modes of operation.

AmberChrom<sup>™</sup> CG161M is a rigid, insoluble, polystyrene-divinylbenzene polymer that is mechanically stable and chemically robust to standard reversed-phase solvents and cleaning agents. Its high surface area, unique pore size, and pore volume distribution make it ideally suited for the separation of peptides. Its narrow, controlled particle size distribution and mechanical stability enable high flow which, coupled with its high capacity for many pharmaceutical compounds, provide excellent process throughput in operation.

Its high degree of chemical stability enables AmberChrom<sup>™</sup> CG161M to be operated within the entire pH range, and the product can be easily cleaned in place (CIP) with most organic solvents and dilute acids and bases. It is an excellent technical and economical alternative to RPC silica, and can be used in high-resolution, low-pressure chromatography.

## **Applications**

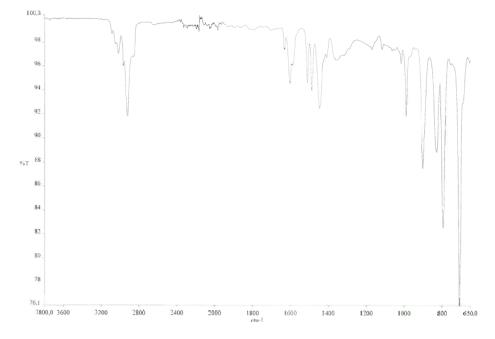
- Separation of penicillin derivatives
- Kinetic exclusion chromatography
- Separation of nucleosides

## **Typical Properties**

Physical Properties	
Copolymer	Styrene-divinylbenzene
Matrix	Macroporous
Туре	Adsorbent
Physical Form	Opaque, white, spherical beads
Nitrogen BET	
Surface Area	900 m²/g
Average Pore Diameter	150 Å
Chemical Properties	
Functional Group	None
Shipping Solvent	20% ethanol
Chemical Resistance	Insoluble in dilute solutions of acids or bases and common solvents:
	IPA, ACN, MeOH
Particle Size	
Particle Diameter, mean <sup>‡</sup>	75 µm
Uniformity Coefficient	1.7
Stability	
Swelling (in solvent):	
Water	0%
Methanol	8%
Ethanol	6%
Isopropanol	12%
Acetonitrile	12%
Acetone	14%
Toluene	4%
Dry	-10%

<sup>‡</sup> In addition to M-grade (75 μm), S-grade (35 μm), and C-grade (120 μm) are available as specialty products. The product can also be provided as a dry material upon request.





## **Regulatory Status**

DuPont can provide regulatory support for AmberChrom<sup>™</sup> CG161M Chromatography Resin to end users under confidentiality, upon request.

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	<ul> <li>Please be aware of the following:</li> <li>WARNING: Oxidizing agents such as nitric acid attack organic ion exchange resins</li> </ul>

• WARNING: Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.



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