# 杜邦沙林料9910物性表

仁捷塑胶

## DuPont Packaging & Industrial Polymers

# DuPont™ Surlyn® 9910

**Surlyn® resins Product Data Sheet**

## Description

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| Product Description | Surlyn® 9910 is a zinc ionomer thermoplastic resin. It is available for use in conventional extrusion and injection equipment, to create various sheets or shapes.<br><br>Surlyn® 9910 thermoplastic resin is an advanced ethylene/methacrylic acid (E/MAA) copolymer, in which the MAA acid groups have been partially neutralized with zinc ions. |

## Restrictions

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| Material Status | • Commercial: Active |

## Typical Characteristics

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| Features | Zinc Ionomer |
| Characteristics / Benefits | Embrittlement Temperature ---------- (-105C) ---------- ASTM D746<br>Abrasion Resistance ---------- 610 NBS Index ---------- ASTM D1630<br>Flexural Modulus (23C) ---------- 330 MPa ---------- ASTM D790<br>Flexural Modulus (-20C) ---------- 731 MPa ---------- ASTM D790<br>Tensile Elongation @ Break (23C) ---- 290% ---------- ASTM D638 / ISO 527-2<br>Tensile Strength @ Break (23C) ------- 24.8 MPa ---------- ASTM D638 / ISO 527-2<br>Tensile Strength @ Yield (23C) --------- 13.8 MPa ---------- ASTM D638<br>Tensile Impact Strength (23C) ---------- 485 ft-lb/in2 ---------- ASTM D1822<br>Tensile Impact Strength (-40C) --------- 480 ft-lb/in2 ---------- ASTM D1822<br>Hardness (Shore D) ---------- 64 ---------- ASTM D2240 / ISO 868<br>Haze (0.25 inch) ---------- 6% ---------- ASTM D1003<br>Notched Izod Impact (23C) ---------- 6.8 ft-lb/in ---------- ASTM D256 |
| Applications | Injection Molding / Sheet Extrusion / Blow Molding |

## Typical Properties

| Physical | Nominal Values | Test Method(s) | |
|---|---|---|---|
| Density () | 0.97 g/cm³ | ASTM D792 | ISO 1183 |
| Melt Flow Rate (190°C/2.16kg) | 0.7 g/10 min | ASTM D1238 | ISO 1133 |
| **Thermal** | **Nominal Values** | **Test Method(s)** | |
| Melting Point (DSC) | 86°C (187°F) | ASTM D3418 | ISO 3146 |
| Freezing Point (DSC) | 46°C (115°F) | ASTM D3418 | |
| Vicat Softening Point () | 62°C (144°F) | ASTM D1525 | ISO 306 |

## Processing Information



网址：http://www.rjplastics.com 电话：13509239386 Email:tjh@rjplastics.com

## General

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| Maximum Processing Temperature | 285°C (545°F) |
| General Processing Information | Surlyn® 9910 is normally processed at melt temperatures ranging from 185°-285°C (365°-545°F). Actual processing temperatures will usually be determined by either the specific equipment or substrate or one of the other polymers in a coextrusion or coinjection..<br><br>Materials of construction used in the processing of this resin should be corrosion resistant. Stainless steels of the types 316, 15-5PH, and 17-4PH are excellent, as is quality chrome or nickel plating, and in particular duplex chrome plating. Type 410 stainless steel is satisfactory, but needs to be tempered at a minimum temperature of 600°C (1112°F) to avoid hydrogen-assisted stress corrosion cracking. Alloy steels such as 4140 are borderline in performance. Carbon steels are not satisfactory. While stainless steels can provide adequate corrosion protection, in some cases severe purging difficulties have been encountered. Nickel plating has been satisfactory, but experiments have shown that chrome surfaces have the least adhesion to acid based polymers. In recent years, the quality of chrome plating has been deteriorating due to environmental pressures, and the corrosion protection has not always been adequate. Chrome over top of stainless steel seems to provide the best combination for corrosion protection and ease of purging.<br><br>If surface properties of the extruded resin require modification (such as, lower C.o.F. for packaging machine processing), refer to the Conpol™ Processing Additive Resins product information guide.<br><br>After processing Surlyn, purge the material out using a polyethylene resin, preferably with a lower melt flow rate than the Surlyn resin in use.<br>The "Disco Purge Method" is suggested as the preferred purging method, as this method usually results in a more effective purging process. Information on the Disco Purge Method can be obtained via your DuPont Sales Representative.<br><br>Never shut down the extrusion system with Surlyn in the extruder and die. Properly purge out the Surlyn with a polyethylene, and shut down the line with polyethylene or polypropylene in the system. |

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| **FDA Status Information** | Surlyn® 9910 resin complies with the provisions of U.S. Food and Drug Administration (FDA) Title 21 Code of Regulations 177:1330. |
| **Safety & Handling** | Surlyn® 9910 as supplied by DuPont are not considered hazardous materials. As with any hot material, care should be taken to protect the hands and other exposed parts of the body when handling molten polymer. At recommended processing temperatures, small amounts of fumes may evolve from the resins. When resins are overheated, more extensive decomposition may occur. Adequate ventilation should be provided to remove fumes from the work area. Disposal of scrap presents no special problems and can be by landfill or incineration in a properly operated incinerator. Disposal should comply with local, state, and federal regulations. Resin pellets can be a slipping hazard. Loose pellets should be swept up promptly to prevent falls. For more detailed information on the safe handling and disposal of DuPont resins, a Material Safety Data Sheet can be obtained from the DuPont Packaging and Industrial Polymers website or by contacting your sales representative. |

**Read and Understand the Material Safety Data Sheet (MSDS) before using this product**

**有关技术和销售资料请向下列地址联系索取：**

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