

Valox* Resin 365

Americas: COMMERCIAL

Unreinforced, opaque, provides chemical resistance and dimensional stability, UL94V-0 rated at 0.031".

| TYPICAL PROPERTIES ¹ | TYPICAL VALUE | Unit | Standard |
|--|---------------|---------------------|-------------|
| MECHANICAL | | | |
| Tensile Stress, yld, Type I, 50 mm/min | 420 | kgf/cm ² | ASTM D 638 |
| Tensile Stress, brk, Type I, 50 mm/min | 420 | kgf/cm ² | ASTM D 638 |
| Tensile Strain, brk, Type I, 50 mm/min | 120 | % | ASTM D 638 |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 700 | kgf/cm ² | ASTM D 790 |
| Flexural Stress, brk, 1.3 mm/min, 50 mm span | 700 | kgf/cm ² | ASTM D 790 |
| Flexural Modulus, 1.3 mm/min, 50 mm span | 22800 | kgf/cm ² | ASTM D 790 |
| Hardness, Rockwell R | 115 | - | ASTM D 785 |
| IMPACT | | | |
| Izod Impact, notched, 23°C | 65 | cm-kgf/cm | ASTM D 256 |
| Izod Impact, notched, -30°C | 19 | cm-kgf/cm | ASTM D 256 |
| Izod Impact, notched, -40°C | 17 | cm-kgf/cm | ASTM D 256 |
| Gardner, 23°C | 387 | cm-kgf | ASTM D 3029 |
| Modified Gardner, 23°C | 387 | cm-kgf | ASTM D 3029 |
| THERMAL | | | |
| HDT, 0.45 MPa, 6.4 mm, unannealed | 129 | °C | ASTM D 648 |
| HDT, 1.82 MPa, 6.4 mm, unannealed | 121 | °C | ASTM D 648 |
| CTE, -40°C to 40°C, flow | 6.84E-05 | 1/°C | ASTM E 831 |
| CTE, -40°C to 95°C, flow | 7.92E-05 | 1/°C | ASTM E 831 |
| CTE, 60°C to 138°C, flow | 8.28E-05 | 1/°C | ASTM E 831 |
| Relative Temp Index, Elec | 105 | °C | UL 746B |
| Relative Temp Index, Mech w/impact | 105 | °C | UL 746B |
| Relative Temp Index, Mech w/o impact | 105 | °C | UL 746B |
| PHYSICAL | | | |
| Specific Gravity | 1.33 | - | ASTM D 792 |

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23±176.C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sabic-ip.com> AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer unless it is specifically agreed to in a writing signed by Seller. No statement by Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right. SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

* Valox is a trademark of SABIC Innovative Plastics IP BV

© 1997-2011 SABIC Innovative Plastics Holding BV. All rights reserved

Valox* Resin 365

Americas: COMMERCIAL

| TYPICAL PROPERTIES ¹ | TYPICAL VALUE | Unit | Standard |
|---|---------------|--------------------|--------------|
| PHYSICAL | | | |
| Specific Volume | 0.75 | cm ³ /g | ASTM D 792 |
| Water Absorption, 24 hours | 0.14 | % | ASTM D 570 |
| Water Absorption, equilibrium, 23C | 0.6 | % | ASTM D 570 |
| Mold Shrinkage, flow, 0.75-2.3 mm | 0.8 - 1.1 | % | SABIC Method |
| Mold Shrinkage, flow, 2.3-4.6 mm | 1 - 1.4 | % | SABIC Method |
| Mold Shrinkage, xflow, 0.75-2.3 mm | 0.9 - 1.3 | % | SABIC Method |
| Mold Shrinkage, xflow, 2.3-4.6 mm | 1.2 - 1.6 | % | SABIC Method |
| ELECTRICAL | | | |
| Dielectric Strength, in oil, 3.2 mm | 12 | kV/mm | ASTM D 149 |
| Relative Permittivity, 100 Hz | 8.5 | - | ASTM D 150 |
| Relative Permittivity, 1 MHz | 5.7 | - | ASTM D 150 |
| Dissipation Factor, 100 Hz | 0.002 | - | ASTM D 150 |
| Dissipation Factor, 1 MHz | 0.03 | - | ASTM D 150 |
| Arc Resistance, Tungsten {PLC} | 6 | PLC Code | ASTM D 495 |
| Hot Wire Ignition {PLC} | 2 | PLC Code | UL 746A |
| High Voltage Arc Track Rate {PLC} | 3 | PLC Code | UL 746A |
| High Ampere Arc Ign, surface {PLC} | 3 | PLC Code | UL 746A |
| Comparative Tracking Index (UL) {PLC} | 3 | PLC Code | UL 746A |
| FLAME CHARACTERISTICS | | | |
| UL Recognized, 94V-0 Flame Class Rating (3) | 0.76 | mm | UL 94 |
| UL Recognized, 94-5VA Rating (3) | 2.2 | mm | UL 94 |
| Oxygen Index (LOI) | 28.8 | % | ASTM D 2863 |
| UV-light, water exposure/immersion | F2 | - | UL 746C |

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23±176.C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER : THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sabic-ip.com>. AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed Seller. No statement Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right. SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

* Valox is a trademark of SABIC Innovative Plastics IP BV

© 1997-2011 SABIC Innovative Plastics Holding BV. All rights reserved

Valox* Resin 365
Americas: COMMERCIAL

| PROCESSING PARAMETERS | TYPICAL VALUE | Unit |
|-----------------------------|---------------|------|
| Injection Molding | | |
| Drying Temperature | 120 | °C |
| Drying Time | 3 - 4 | hrs |
| Drying Time (Cumulative) | 12 | hrs |
| Maximum Moisture Content | 0.02 | % |
| Melt Temperature | 250 - 265 | °C |
| Nozzle Temperature | 245 - 260 | °C |
| Front - Zone 3 Temperature | 250 - 265 | °C |
| Middle - Zone 2 Temperature | 245 - 260 | °C |
| Rear - Zone 1 Temperature | 240 - 255 | °C |
| Mold Temperature | 50 - 75 | °C |
| Back Pressure | 0.3 - 0.7 | MPa |
| Screw Speed | 50 - 100 | rpm |
| Shot to Cylinder Size | 40 - 80 | % |
| Vent Depth | 0.025 - 0.038 | mm |

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23±176.C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

DISCLAIMER : THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sabic-ip.com>. AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED. (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed Seller. No statement Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right. SABIC Innovative Plastics is a trademark of SABIC Holding Europe B.V.

* Valox is a trademark of SABIC Innovative Plastics IP BV

© 1997-2011 SABIC Innovative Plastics Holding BV. All rights reserved