

Datenblatt

Legierung AD 110

Laserdraht AD 310

CE 0124

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-------------------------|-------|----|-------|----|------|----|------|----|------|----|------|----|------|----|------|----|------|---|----|-------|----|-------|----|------|----|------|----|------|----|------|----|------|----|------|----|------|
| Typ: | Dentale Metallkeramik-Legierung auf Goldbasis (hochgoldhaltig), Typ 4 (extra hart), gem. DIN EN ISO 22674 Zahnheilkunde – Metallische Werkstoffe für festsitzenden und herausnehmbaren Zahnersatz und Vorrichtungen | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Farbe: | gelb | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indikationen: | Kronen Brücken jeder physiologisch vertretbaren Spannweite | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zusammensetzung: (Massenanteile in %) | <table border="1"> <tr><td>Au</td><td>85,90</td></tr> <tr><td>Pt</td><td>11,70</td></tr> <tr><td>Zn</td><td>1,50</td></tr> <tr><td>Nb</td><td>0,40</td></tr> <tr><td>Rh</td><td>0,20</td></tr> <tr><td>In</td><td>0,10</td></tr> <tr><td>Mn</td><td>0,10</td></tr> <tr><td>Fe</td><td>0,05</td></tr> <tr><td>Ir</td><td>0,05</td></tr> </table> | Au | 85,90 | Pt | 11,70 | Zn | 1,50 | Nb | 0,40 | Rh | 0,20 | In | 0,10 | Mn | 0,10 | Fe | 0,05 | Ir | 0,05 | <table border="1"> <tr><td>Au</td><td>85,90</td></tr> <tr><td>Pt</td><td>11,70</td></tr> <tr><td>Rh</td><td>0,20</td></tr> <tr><td>Ir</td><td>0,05</td></tr> <tr><td>Zn</td><td>1,50</td></tr> <tr><td>Nb</td><td>0,40</td></tr> <tr><td>Mn</td><td>0,10</td></tr> <tr><td>In</td><td>0,10</td></tr> <tr><td>Fe</td><td>0,05</td></tr> </table> | Au | 85,90 | Pt | 11,70 | Rh | 0,20 | Ir | 0,05 | Zn | 1,50 | Nb | 0,40 | Mn | 0,10 | In | 0,10 | Fe | 0,05 |
| Au | 85,90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pt | 11,70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zn | 1,50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nb | 0,40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rh | 0,20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| In | 0,10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mn | 0,10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fe | 0,05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ir | 0,05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Au | 85,90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pt | 11,70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rh | 0,20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ir | 0,05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zn | 1,50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nb | 0,40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mn | 0,10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| In | 0,10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fe | 0,05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Technische Daten: | Dichte in g/cm ³ | 18,9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Vickershärte HV 5/30 | (s) 180 (n) 200 (a) 260 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Dehngrenze R _{p0,2} in MPa | (s) 440 (n) 490 (a) 620 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bruchdehnung in % | (s) 6 (n) 4 (a) 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mittlerer linearer WAK 25 – 500 °C in 10 ⁻⁶ K ⁻¹ | 14,4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mittlerer linearer WAK 25 – 600 °C in 10 ⁻⁶ K ⁻¹ | 14,6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E-Modul in GPa | 94 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Schmelzintervall in °C | 1050 – 1130 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Verarbeitung: | Vorwärmtemperatur der Gießformen in °C | 850 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Gießtemperatur in °C | 1280 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Tiegel | Grafit/Keramik | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Oxidbrand | 960°C/15min | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Aushärten | 450°C/15min | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Geeignete Lote: | Verbindungen vor dem Keramikbrand | AD 8021050 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Verbindungen nach dem Keramikbrand | AD 8010760 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nebenwirkungen | In Einzelfällen wurden Überempfindlichkeitsreaktionen und elektrochemisch bedingte, örtliche Missempfindungen, wie Geschmacksirritation und Reizung der Mundschleimhaut beobachtet. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gegenanzeigen | Bei Überempfindlichkeiten gegen einzelne Elemente einer Legierung darf diese nicht verwendet werden. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wechselwirkungen | Approximaler oder antagonistischer Kontakt zu nicht artgleichen Legierungen kann galvanische Effekte auslösen, die elektrochemisch bedingte, örtliche Missempfindungen zur Folge haben. Daher Kontakt zwischen unterschiedlichen Legierungstypen vermeiden. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sicherheitshinweise | Beim Schleifen oder Polieren Stäube nicht einatmen. Geeignete Schutzmaske und Absaugung verwenden. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

s = Selbstaushärtung, n = nach dem Keramikbrand, a = ausgehärtet aus dem Zustand n