

# SINTERING-DATA-SHEET

DR. FRITSCH GmbH & Co. KG

Dieselstraße 8

70736 Fellbach

Tel. 0711-518320; Fax 0711-5183210

<b>powder - code:</b>	Diacob 801
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<b>main component:</b>	Co	<b>binder:</b>	2% alcohol	<b>date:</b>	26.10.98
<b>machine type:</b>	DSP-25	<b>aver. Grain size</b>	< 1 µm	<b>testperson:</b>	Ga
<b>utilisation:</b>					

<b>heating by</b>	<b>die:</b>	X	<b>temperature measure-</b>	<b>pyroscope:</b>	
	<b>punches:</b>		<b>ment by:</b>	<b>thermocouple:</b>	X

<b>temperature:</b>	°C	780	820	860	900	940	980	1020	1060
<b>specific pressure:</b>	N/mm <sup>2</sup>	35	==>						
<b>machine pressure:</b>	bar	55	==>						
<b>sintering time:</b>	min	3	==>						
<b>bending strength:</b>	N/mm <sup>2</sup>								
<b>stretch at break:</b>	%								
<b>average hardness:</b>	HRB	108	108	108	108	107	0	0	0
<b>hardness scattering:</b>	HRB	107-108	108-109	108-109	108-109	104-108	0	0	0
<b>weight:</b>	g	17	==>						
<b>weight after sintering:</b>	g	16,876	16,788	16,869	16,444	16,665	0	0	0

<b>volume:</b>									
<b>V = Gs - Gw</b>	cm <sup>3</sup>	1,951	1,933	1,94	1,889	1,919	0	0	0
<b>density:</b>									
<b>D = Gs / V</b>	g/cm <sup>3</sup>	8,65	8,68	8,7	8,71	8,68	0	0	0

<b>weight loss:</b>									
<b>G = Ge - Gs</b>	g	0	0	0	0	0	0	0	0
<b>rel. Weight loss:</b>									
<b>Gr = G * 100 / Ge</b>	%	0	0	0	0	0	0	0	0

<b>notes:</b>	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0

**Attention:**

Depending on mould-geometry and type and place of temperature-measurement an increase up to 60 °C must be done to get the same result !  
 In case of moulds with a high number of graphite punches a certain friction value needs to be considered. To obtain the detailed formula you are welcome to contact us.

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