

Murzynowo

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **43.1**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (60%)	80 %	4
Grain	Weyermann - Pilsner Malt	0.5 kg (10%)	81 %	5
Grain	Weyermann - Carafa I special	0.5 kg (10%)	70 %	690
Grain	Fawcett - Pszeniczny Czekoladowy	0.4 kg (8%)	73 %	1001
Grain	crystal 160 ebc	0.3 kg (6%)	78 %	160
Grain	Carafa II special	0.2 kg (4%)	70 %	812
Grain	Jęczmień palony	0.1 kg (2%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	60 min	13.2 %
Aroma (end of boil)	Mosaic	10 g	10 min	12 %
Aroma (end of boil)	Simcoe	20 g	10 min	13.2 %
Aroma (end of boil)	Simcoe	30 g	0 min	13.2 %
Aroma (end of boil)	Mosaic	30 g	0 min	12 %
Dry Hop	Mosaic	60 g	1 day(s)	12 %