

smakołyk

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **39**
- SRM **39.7**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **69 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **90 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **21.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	cm Smoked Malt	2 kg (32.3%)	81 %	6
Grain	Strzegom Wiedeński	1 kg (16.1%)	79 %	10
Grain	Strzegom Karmel 150	0.4 kg (6.5%)	75 %	150
Grain	Czekoladowy	0.8 kg (12.9%)	60 %	788
Grain	Weyermann pszeniczny jasny wedzony	2 kg (32.3%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	100 g	5 min	10 %
Boil	Mosaic	15 g	60 min	10 %