

Murphy's klon

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **25**
- SRM **31.8**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.9 liter(s)**
- Total mash volume **14.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **10.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	2.5 kg (63.3%)	83 %	6
Sugar	cukier trzcinowy	0.3 kg (7.6%)	100 %	2
Grain	płatki jęczmienne	0.5 kg (12.7%)	60 %	4
Grain	Jęczmień palony	0.3 kg (7.6%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.25 kg (6.3%)	68 %	1200
Grain	Caramel/Crystal Malt	0.1 kg (2.5%)	74 %	158

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	East Kent Goldings	25 g	15 min	6.3 %
Boil	East Kent Goldings	25 g	60 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis