Czarny suchar

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **25**
- SRM **37.9**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **76C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3 kg *(63.2%)*	81 %	6
Grain	Płatki jęczmienne	1 kg *(21.1%)*	85 %	3
Grain	Jęczmień palony	0.5 kg *(10.5%)*	55 %	1150
Grain	Fawcett - Chocolate Malt	0.25 kg *(5.3%)*	60 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	30 g	60 min	5.1 %
Boil	East Kent Goldings	20 g	30 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - American Ale II	Ale	Liquid	1000 ml	Wyeast Labs

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.