Żytni stout

- Gravity **13.9 BLG**
- ABV **---**
- IBU **32**
- SRM **40**
- Style **Oatmeal 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **37 C**, Time **20 min**
- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **39.8C**
- Add grains
- Keep mash **20 min** at **37C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg *(63.8%)*	85 %	7
Grain	Rye, Flaked	1.2 kg *(25.5%)*	78.3 %	4
Grain	Jęczmień palony	0.25 kg *(5.3%)*	55 %	985
Grain	Carafa III	0.25 kg *(5.3%)*	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kent Goldings	50 g	60 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	10 g	Danstar

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min

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