Piwo Żytnie

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **15**
- SRM **7.2**
- Style **Roggenbier**

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 **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **44 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	3.2 kg *(61.5%)*	85 %	8
Grain	Strzegom Monachijski typ I	1 kg *(19.2%)*	79 %	16
Grain	Pilzneński	0.75 kg *(14.4%)*	81 %	4
Grain	Caramunich® typ I	0.25 kg *(4.8%)*	73 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Aroma (end of boil)	Calista	30 g	10 min	3.9 %
Whirlpool	Calista	20 g	1 min	3.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew WB-06	Wheat	Slant	300 ml	---

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