Żitą

- Gravity **11.2 BLG**
- ABV **---**
- IBU **15**
- SRM **10.1**
- 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 **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	2 kg *(50%)*	85 %	8
Grain	Monachijski	1 kg *(25%)*	80 %	16
Grain	Karmelowy żytni Strzegom	0.2 kg *(5%)*	75 %	150
Grain	Strzegom Pale Ale	0.8 kg *(20%)*	79 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	25 g	60 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM40 Pszeniczny Łan	Wheat	Liquid	900 ml	Fermentum Mobile

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