Jasne Pełne

- Gravity **13.4 BLG**
- ABV **---**
- IBU **---**
- SRM **5.7**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **27.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **15 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **15 min** at **77C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg *(80%)*	81 %	4
Grain	Strzegom Monachijski typ I	1 kg *(20%)*	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Marynka	30 g	70 min	10 %
Mash	Lublin (Lubelski)	5 g	30 min	4 %
Mash	Lublin (Lubelski)	20 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	7 g	Safale