

## Jarząb pierwszy

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **19**
- SRM **2.6**

### 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 **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **52 C**, Time **20 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76.5 C**, Time **20 min**
- Temp **100 C**, Time **60 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **20 min** at **76.5C**
- Keep mash **60 min** at **100C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	słód pilsneski	5 kg (100%)	--- %	2.1

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	10 min	10 %
Boil	Lublin (Lubelski)	25 g	50 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale