

Ale

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **43**
- SRM **5.8**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **6 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **14 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **71 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **71C**
- Keep mash **1 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (88.9%)	80 %	4
Grain	Karmelowy Czerwony	0.5 kg (11.1%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	50 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	10 min	4 %
Dry Hop	Lublin (Lubelski)	20 g	5 day(s)	4 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Finning	Mech Irlandzki	5 g	Boil	15 min