

JASNE

- Gravity **15.4 BLG**
- ABV ---
- IBU **48**
- SRM **8.4**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **48.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **25.3 liter(s)**
- Total mash volume **35.4 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **73 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **25.3 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **50 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **33.2 liter(s)** of **76C** water or to achieve **48.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilzneński klepiskowy	6 kg (59.4%)	79 %	3.5
Grain	Strzegom Monachijski typ II	2 kg (19.8%)	79 %	23
Grain	vienna chateau	0.6 kg (5.9%)	79 %	5.5
Grain	Strzegom Pale Ale	0.5 kg (5%)	79 %	6.5
Grain	Carahell	0.5 kg (5%)	77 %	26
Grain	Żytni	0.5 kg (5%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	50 g	90 min	11 %
Boil	Lubelski	33 g	45 min	3.5 %
Boil	Palisade	27 g	10 min	8.3 %

Yeasts

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

FM 21 odkrycie sezonu	Ale	Slant	200 ml	---
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