

Jasne saaz

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **27**
- SRM **4.7**
- Style **Dortmunder Export**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **19.1 liter(s)** of strike water to **73.5C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **75C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (94.3%)	80 %	5
Grain	Strzegom Karmel 50	0.3 kg (5.7%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Aroma (end of boil)	Chinook	23 g	5 min	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	---

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock	2 g	Boil	10 min