

Proste

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **20**
- SRM **16**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **68 C**, Time **10 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **10 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Vienna Malt	4 kg (62.5%)	81 %	8
Grain	Caramel Aromatic - Viking Malt (Strzegom)	1 kg (15.6%)	81 %	180
Grain	Viking Malt Wędzony Czereśnią (Strzegom)	1 kg (15.6%)	82 %	10
Adjunct	Płatki ryżowe błyskawiczne	0.4 kg (6.3%)	--- %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale