

#100 Kaipaus on ainoa energia

- Gravity **18.9 BLG**
- ABV **8.2 %**
- IBU ---
- SRM **6.5**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **12.3 liter(s)**
- Trub loss **8 %**
- Size with trub loss **13.3 liter(s)**
- Boil time **2 min**
- Evaporation rate **1 %/h**
- Boil size **13.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **42 C**, Time **15 min**
- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **15 min**
- Temp **80 C**, Time **5 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **45.7C**
- Add grains
- Keep mash **15 min** at **42C**
- Keep mash **15 min** at **52C**
- Keep mash **15 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **80C**
- Sparge using **4.5 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (68.2%)	82 %	4
Grain	Żytni 4-14 EBC Viking Malt	1 kg (22.7%)	80 %	9
Grain	Monachijski Ciemny 19-25 EBC Viking Malt	0.4 kg (9.1%)	79 %	22

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Lubelski PL 2019 szyszka	100 g	1 min	4.6 %
Mash	Jałowiec gałąź	13.5 g	40 min	1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Drożdże piekarskie	Ale	Culture	18 g	Lallemand