

APKA

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **34**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Vikin Malt	3.5 kg (83.3%)	--- %	6
Grain	Monachijski Jasny Viking Malt	0.5 kg (11.9%)	--- %	18
Grain	Karmelowy 30EBC Viking Malt	0.2 kg (4.8%)	--- %	35

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	11.7 %
Boil	Citra	25 g	10 min	12.9 %
Whirlpool	Sabro	25 g	10 min	15.8 %
Dry Hop	Citra	50 g	4 day(s)	12.9 %
Dry Hop	Sabro	50 g	4 day(s)	15.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44	Ale	Dry	10 g	Fermentis Division of S.I.Lesaffre

Extras

Type	Name	Amount	Use for	Time
Water Agent	Sól Epsom - Siarczan MAgnezu	3 g	Boil	70 min
Fining	Whirlfloc	1.25 g	Boil	15 min