

KAPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **35**
- SRM **7.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **23.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (85.5%)	79 %	6
Grain	Carahell	0.5 kg (8.5%)	77 %	26
Grain	Acid Malt	0.25 kg (4.3%)	58.7 %	6
Grain	Strzegom Karmel 300	0.1 kg (1.7%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Boil	Cascade	10 g	15 min	6 %
Boil	Mandarina Bavaria	10 g	10 min	8 %
Boil	Cascade	15 g	3 min	6 %
Boil	Mandarina Bavaria	15 g	3 min	8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	Kaffir	10 g	Boil	10 min
Flavor	Kaffir (napar)	10 g	Bottling	---