

# kapa

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **35**
- SRM **6.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1 kg (14.5%)	81 %	4
Grain	Viking Pale Ale malt	5 kg (72.5%)	80 %	5
Grain	Strzegom Wiedeński	0.3 kg (4.3%)	79 %	10
Grain	Pszeniczny	0.1 kg (1.4%)	85 %	4
Grain	Caramunich® typ I	0.5 kg (7.2%)	73 %	80

## Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Amarillo	50 g	80 min	9.5 %
Boil	Galaxy	10 g	60 min	15 %
Boil	Citra	10 g	60 min	12 %
Boil	Galaxy	5 g	20 min	15 %
Boil	Citra	5 g	20 min	12 %
Boil	Galaxy	10 g	5 min	15 %
Boil	Citra	10 g	5 min	12 %
Dry Hop	Galaxy	30 g	4 day(s)	15 %
Dry Hop	Citra	30 g	4 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us 05	Ale	Dry	11.5 g	fermentis

## Notes

- amarillo od poczatku zacierania  
*Mar 19, 2018, 8:45 PM*