

mango/porzeczka apa

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **36**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **41.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **46.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **33.7 liter(s)**
- Total mash volume **43.9 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **33.7 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **23.2 liter(s)** of **76C** water or to achieve **46.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	9 kg (88.2%)	80 %	5
Grain	Pszeniczny	1 kg (9.8%)	85 %	4
Grain	Weyermann Caramunich 3	0.2 kg (2%)	76 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	30 g	30 min	12 %
Aroma (end of boil)	Centennial	20 g	20 min	10.5 %
Aroma (end of boil)	Centennial	30 g	15 min	10.5 %
Aroma (end of boil)	Centennial	30 g	10 min	10.5 %
Aroma (end of boil)	Centennial	20 g	0 min	10.5 %
Aroma (end of boil)	Citra	20 g	0 min	12 %
Dry Hop	Amarillo	100 g	3 day(s)	9.5 %
dodane do wersji z czarna porzeczka				
Dry Hop	Mosaic	100 g	3 day(s)	10 %
dodane do wersji z pulpą mango				

Yeasts

Name	Type	Form	Amount	Laboratory
US05	Ale	Dry	23 g	---

Extras

Type	Name	Amount	Use for	Time
Flavor	pulpa mango	1000 g	Primary	12 day(s)
Flavor	pulpa czarna porzeczka	1000 g	Primary	12 day(s)