

# #146 Witajcie, zabaweczki - znaleźliście mnie, kiedy ja was znaleźć nie mogłem

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **18**
- SRM **3.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20.6 liter(s)**
- Trub loss **6 %**
- Size with trub loss **21.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **23.3 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16.3 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **23.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (93%)	80 %	5
Grain	Carabody	0.3 kg (7%)	72 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amora Preta PL 2021	20 g	40 min	7.6 %
Aroma (end of boil)	Amora Preta PL 2021	50 g	1 min	7.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Slant	40 ml	Lallemand