w8

- Gravity **7.1 BLG**
- ABV **2.7 %**
- IBU **13**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16 liter(s)**

Steps

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

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **83C**
- Add grains
- Keep mash **60 min** at **76C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg *(62.5%)*	80 %	5
Grain	Pszeniczny	0.3 kg *(9.4%)*	85 %	4
Grain	Abbey Malt Weyermann	0.3 kg *(9.4%)*	75 %	45
Grain	Płatki owsiane	0.4 kg *(12.5%)*	85 %	3
Grain	Weyermann - Carapils	0.2 kg *(6.3%)*	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Mandarina Bavaria	30 g	5 min	10 %
Dry Hop	Mandarina Bavaria	50 g	4 day(s)	10 %
Boil	Mandarina Bavaria	10 g	30 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	100 ml	fermentis