

Aaa

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **48**
- SRM **12.3**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (81.8%)	80 %	5
Grain	Strzegom Bursztynowy	0.6 kg (10.9%)	70 %	49
Grain	Crystal II 200	0.2 kg (3.6%)	71 %	200
Grain	Strzegom Karmel 300	0.2 kg (3.6%)	70 %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	5 g	60 min	14.7 %
Boil	Warrior	10 g	45 min	14.7 %
Boil	Warrior	10 g	30 min	14.7 %
Aroma (end of boil)	Mandarina Bavaria	15 g	20 min	7.6 %
Aroma (end of boil)	Mandarina Bavaria	15 g	10 min	7.6 %
Aroma (end of boil)	Mandarina Bavaria	10 g	5 min	7.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	10 g	---