

AAA

- Gravity **14.3 BLG**
- ABV ---
- IBU **31**
- SRM **25.3**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3 kg (50%)	74.84 %	13
Grain	Pilzniejszy	2 kg (33.3%)	75.29 %	7
Grain	Karmelowy 150	0.5 kg (8.3%)	73.32 %	479
Grain	Oats, Flaked	0.5 kg (8.3%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10.5 %
Dry Hop	Citra	40 g	7 day(s)	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	11 g	---