

APA

- Gravity **12.1 BLG**
- ABV ---
- IBU **39**
- SRM **12.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **15 %**
- Size with trub loss **23 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 **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **52 C**, Time **5 min**
- Temp **62 C**, Time **65 min**
- Temp **67 C**, Time **5 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **65 min** at **62C**
- Keep mash **5 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.2 kg (71.1%)	81 %	4
Grain	Weyermann pszeniczny jasny	0.2 kg (4.4%)	80 %	6
Grain	Weyermann - Carafa I	0.1 kg (2.2%)	70 %	690
Grain	Monachijski	1 kg (22.2%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Sorachi Ace	10 g	5 min	10 %
Boil	Sorachi Ace	10 g	1 min	10 %
Dry Hop	Sorachi Ace	10 g	7 day(s)	10 %
Boil	Lublin (Lubelski)	20 g	60 min	4 %