

APA

- Gravity **12.9 BLG**
- ABV ---
- IBU **36**
- SRM **11.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **12.6 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **9.8 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **5.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2 kg (71.4%)	85 %	7
Grain	Weyermann - Pale Wheat Malt	0.5 kg (17.9%)	85 %	5
Grain	Caramel/Crystal Malt - 120L	0.3 kg (10.7%)	72 %	160

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	7 g	60 min	12 %
Aroma (end of boil)	Equinox	20 g	1 min	13.1 %
Aroma (end of boil)	Amarillo	20 g	1 min	9.5 %
Dry Hop	Equinox	30 g	5 day(s)	13.1 %
Dry Hop	Citra	30 g	2 day(s)	12 %
Boil	Citra	5 g	30 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	200 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	5 g	Mash	60 min