

Summer Ale

- Gravity **11 BLG**
- ABV ---
- IBU **28**
- SRM **6.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **47.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **52 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **38.6 liter(s)** of **76C** water or to achieve **52 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5.5 kg (76.4%)	81 %	4
Grain	Pszeniczny	1 kg (13.9%)	85 %	4
Grain	crystal	0.2 kg (2.8%)	80 %	300
Sugar	cukier	0.5 kg (6.9%)	100 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	10.6 %
Aroma (end of boil)	Citra	30 g	10 min	12 %
Aroma (end of boil)	Amarillo	25 g	5 min	9.5 %
Aroma (end of boil)	Amarillo	25 g	0 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	200 ml	fermetis