

3.American Bitter

- Gravity **11 BLG**
- ABV ---
- IBU **49**
- SRM **8.5**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.8 kg (95%)	79 %	6
Grain	Fawcett - Crystal	0.2 kg (5%)	70 %	160

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	15 g	60 min	17 %
Boil	Cascade	20 g	10 min	6 %
Boil	Citra	20 g	5 min	12 %
Boil	Summit	25 g	3 min	17 %
Whirlpool	Citra	15 g	0 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	mech	5 g	Boil	15 min