

Sunny Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **49**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **80 min**
- Evaporation rate **12.5 %/h**
- Boil size **28.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg (76.2%)	82 %	4
Grain	Viking Munich Malt	0.5 kg (9.5%)	78 %	18
Grain	Viking Wheat Malt	0.5 kg (9.5%)	83 %	5
Grain	Weyermann - Carapils	0.25 kg (4.8%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	8.8 %
Boil	Iunga	10 g	60 min	11.6 %
Boil	Lublin (Lubelski)	25 g	30 min	4 %
Boil	Orbit	25 g	10 min	9.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	150 ml	Fermentis