

Supertramp Hoppy Golden Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **33**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **51 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **80 C**, Time **5 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **30 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **80C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (42.6%)	80 %	5
Grain	Viking Pale Ale malt	1.2 kg (25.5%)	80 %	5
Grain	Pszeniczny	1.5 kg (31.9%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	30 min	14 %
Aroma (end of boil)	Citra	15 g	5 min	14 %
Whirlpool	Citra	30 g	15 min	12 %

Yeasts

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