

Hop Head IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **60**
- SRM **5.7**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **30 min**
- Evaporation rate **5 %/h**
- Boil size **12.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.1 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **11.7 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **75C**
- Sparge using **4 liter(s)** of **76C** water or to achieve **12.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.68 kg (80%)	80 %	5
Grain	Strzegom Monachijski typ I	0.5 kg (14.9%)	79 %	16
Grain	Weyermann - Carapils	0.17 kg (5.1%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	3 g	30 min	6 %
Boil	Simcoe	3 g	30 min	13.2 %
Boil	Columbus/Tomahawk/Zeus	3 g	30 min	15.5 %
Boil	Cascade	3 g	25 min	6 %
Boil	Simcoe	3 g	25 min	13.2 %
Boil	Columbus/Tomahawk/Zeus	3 g	25 min	15.5 %
Boil	Cascade	3 g	20 min	6 %
Boil	Simcoe	3 g	20 min	13.2 %
Boil	Columbus/Tomahawk/Zeus	3 g	20 min	15.5 %
Boil	Cascade	3 g	15 min	6 %
Boil	Simcoe	3 g	15 min	13.2 %

Boil	Columbus/Tomahawk/Zeus	3 g	15 min	15.5 %
Boil	Cascade	3 g	10 min	6 %
Boil	Simcoe	3 g	10 min	13.2 %
Boil	Columbus/Tomahawk/Zeus	3 g	10 min	15.5 %
Boil	Cascade	3 g	5 min	6 %
Boil	Simcoe	3 g	5 min	13.2 %
Boil	Columbus/Tomahawk/Zeus	3 g	5 min	15.5 %
Whirlpool	Cascade	25 g	0 min	6 %
Whirlpool	Simcoe	25 g	0 min	13.2 %
Dry Hop	Cascade	17.5 g	5 day(s)	6 %
Dry Hop	Simcoe	17.5 g	5 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	5.5 g	Mangrove Jack's