Tomahawk ipa

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **72**
- SRM **5.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg *(100%)*	80 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	38 g	60 min	15.5 %
Aroma (end of boil)	Crystal	25 g	5 min	4.5 %
Dry Hop	Columbus/Tomahawk/Zeus	25 g	2 day(s)	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Veridan ipa	Ale	Dry	11 g	Lallemand

Extras

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

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.