

Jack Hammer

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **150**
- SRM **6.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **27.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

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

Mash step by step

- Heat up **21 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **27.2 liter(s)** of wort

Fermentables

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

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|---------|----------|------------|
| Boil | Centennial | 25 g | 60 min | 10.5 % |
| Boil | Columbus/Tomahawk/Zeus | 30 g | 50 min | 15.5 % |
| Boil | Centennial | 50 g | 30 min | 10.5 % |
| Boil | Columbus/Tomahawk/Zeus | 18.75 g | 30 min | 15.5 % |
| Boil | Centennial | 50 g | 10 min | 10.5 % |
| Boil | Columbus/Tomahawk/Zeus | 25 g | 10 min | 15.5 % |
| Dry Hop | Amarillo | 100 g | 4 day(s) | 9.5 % |
| Dry Hop | Citra | 100 g | 4 day(s) | 12 % |
| Dry Hop | Simcoe | 100 g | 4 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|--------|--------|-------------|
| Wyeast - American Ale | Ale | Liquid | 200 ml | Wyeast Labs |