

## warrior-ipa

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **33**
- SRM **4.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **37 liter(s)**
- Trub loss **5 %**
- Size with trub loss **38.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **44.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **31.5 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **68 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **22.5 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **31.1 liter(s)** of **76C** water or to achieve **44.6 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński  | 4 kg (44.4%)  | 85 %  | 4   |
| Grain | Viking Pale Ale malt | 4 kg (44.4%)  | 85 %  | 5   |
| Grain | Płatki owsiane       | 0.4 kg (4.4%) | 85 %  | 3   |
| Grain | Monachijski          | 0.6 kg (6.7%) | 85 %  | 16  |

### Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Warrior    | 30 g   | 30 min | 17 %       |
| Boil                | Warrior    | 30 g   | 10 min | 17 %       |
| Aroma (end of boil) | Citra      | 30 g   | 0 min  | 13.7 %     |
| Aroma (end of boil) | Centennial | 30 g   | 0 min  | 9.5 %      |
| Aroma (end of boil) | ekuanot    | 30 g   | 0 min  | 13.1 %     |

### Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale  | Slant | 100 ml | fermentis  |

### Notes

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

- 37 litrow 15 blg.  
*Dec 30, 2018, 2:17 PM*