

# American IPA v3 #82

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **64**
- SRM **6.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.3 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.42 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.9 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **75 C**, Time **7 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **7 min** at **75C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **26.3 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount           | Yield  | EBC |
|-------|------------------------|------------------|--------|-----|
| Grain | Viking - pilzneński    | 1.135 kg (19.4%) | 80 %   | 4   |
| Grain | Mep©Ale                | 3.615 kg (61.8%) | 82.1 % | 5.5 |
| Grain | Bruntal - pszeniczny   | 0.6 kg (10.3%)   | 83 %   | 5   |
| Grain | Viking - monachijski I | 0.3 kg (5.1%)    | 78 %   | 16  |
| Grain | Chateau - cara gold    | 0.2 kg (3.4%)    | 78 %   | 120 |

## Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | Warrior    | 22 g   | 60 min   | 14.7 %     |
| Aroma (end of boil) | Columbus   | 25 g   | 15 min   | 12.4 %     |
| Aroma (end of boil) | Centennial | 25 g   | 10 min   | 9.5 %      |
| Aroma (end of boil) | Simcoe     | 25 g   | 5 min    | 13.2 %     |
| Aroma (end of boil) | Citra      | 26.5 g | 1 min    | 13.5 %     |
| Dry Hop             | Centennial | 30 g   | 5 day(s) | 9.5 %      |
| Dry Hop             | Amarillo   | 30 g   | 5 day(s) | 8.8 %      |
| Dry Hop             | Simcoe     | 30 g   | 5 day(s) | 13.2 %     |

## Yeasts

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

| Name                        | Type | Form  | Amount | Laboratory       |
|-----------------------------|------|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale  | Slant | 150 ml | Fermentum Mobile |

### Extras

| Type        | Name                  | Amount | Use for | Time  |
|-------------|-----------------------|--------|---------|-------|
| Water Agent | gips piwowarski       | 2 g    | Mash    | ---   |
| Water Agent | chlorek wapnia [ml]   | 3.44 g | Mash    | ---   |
| Water Agent | kwas mlekowy 80% [ml] | 3.72 g | Mash    | ---   |
| Water Agent | sól epsom             | 1.5 g  | Mash    | ---   |
| Fining      | mech irlandzki        | 3 g    | Boil    | 5 min |