

American IPA v3 #82

- 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 |