

IPAwer

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **59**
- SRM **12.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **17.4 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **73 C**, Time **30 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **30 min** at **73C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 3 kg (62%) | 80 % | 7 |
| Grain | Pszeniczny | 0.5 kg (10.3%) | 85 % | 15 |
| Grain | Monachijski | 1 kg (20.7%) | 80 % | 16 |
| Grain | Caramel/Crystal Malt - 10L | 0.3 kg (6.2%) | 75 % | 160 |
| Grain | Barwiący | 0.04 kg (0.8%) | 55 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Galaxy | 20 g | 60 min | 15 % |
| Boil | Simcoe | 15 g | 60 min | 13.2 % |
| Aroma (end of boil) | Simcoe | 15 g | 1 min | 13.2 % |
| Aroma (end of boil) | Amarillo | 15 g | 1 min | 9.5 % |
| Dry Hop | Simcoe | 30 g | 3 day(s) | 13.2 % |
| Dry Hop | Amarillo | 15 g | 3 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--|-----|-----|------|-----------------|
| Mangrove Jack's M36 Liberty Bell Yeast | Ale | Dry | 10 g | Mangrove Jack's |
|--|-----|-----|------|-----------------|