

Aj PI wo Ej

- Gravity **14.6 BLG**
- ABV ---
- IBU **77**
- SRM **14.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **15 %**
- Size with trub loss **28.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **33.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.77 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **20 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **71.9C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **20 min** at **78C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **33.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|--------|-----|
| Grain | Słód Belgian Pale Ale | 3.5 kg (50%) | 80 % | 8 |
| Grain | Słód Belgian Monachijski | 1.5 kg (21.4%) | 80 % | 15 |
| Grain | RedX | 0.8 kg (11.4%) | 79 % | 30 |
| Grain | Karmelowy Czerwony | 0.3 kg (4.3%) | 75 % | 59 |
| Grain | Pale Crystal | 0.2 kg (2.9%) | 72.8 % | 90 |
| Grain | Słód Aromatic | 0.2 kg (2.9%) | 75 % | 50 |
| Grain | CaraRed Weyermann | 0.5 kg (7.1%) | 74 % | 60 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil | Simcoe | 25 g | 60 min | 11.4 % |
| Boil | Lemon drop | 10 g | 30 min | 4.6 % |
| Aroma (end of boil) | ADHA 529 Experimental | 30 g | 25 min | 10.6 % |
| Aroma (end of boil) | Mosaic | 20 g | 20 min | 12 % |

| | | | | |
|---------------------|--------------------------|------|----------|--------|
| Aroma (end of boil) | ADHA 529 Experimental | 20 g | 15 min | 10.5 % |
| Aroma (end of boil) | Lemon drop | 20 g | 15 min | 4.6 % |
| Aroma (end of boil) | Citra | 10 g | 10 min | 13.5 % |
| Aroma (end of boil) | Mosaic | 10 g | 10 min | 12 % |
| Aroma (end of boil) | ADHA 529 | 5 g | 10 min | 10.5 % |
| Dry Hop | Mosaic | 10 g | 7 day(s) | 10 % |
| Dry Hop | Lemon drop | 10 g | 7 day(s) | 4.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------------|------|------|--------|----------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 11.5 g | Mangrove Jacks |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Fining | Mech Irlandzki | 10 g | Boil | 15 min |
| Water Agent | Gips Piwowarski | 8 g | Mash | 60 min |