

Hops Hops Hops

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **62**
- SRM **5.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (83.3%) | 85 % | 7 |
| Grain | Monachijski | 0.7 kg (11.7%) | 80 % | 16 |
| Grain | Weyermann - Carapils | 0.3 kg (5%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Amarillo | 10 g | 60 min | 8.9 % |
| Boil | Simcoe | 30 g | 60 min | 13.2 % |
| Boil | Amarillo | 30 g | 30 min | 8.9 % |
| Aroma (end of boil) | Amarillo | 25 g | 0 min | 8.9 % |
| Whirlpool | Simcoe | 30 g | 0 min | 13.2 % |
| Dry Hop | Cascade | 30 g | 4 day(s) | 6 % |
| Dry Hop | Citra | 30 g | 4 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 100 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g | Boil | 10 min |
| Water Agent | gips | 4 g | Mash | 60 min |