

- Gravity **15.4 BLG**
- ABV ---
- IBU **49**
- SRM **10.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **100 min**
- Evaporation rate **12 %/h**
- Boil size **30 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **31.3 liter(s)**

Steps

- Temp **64 C**, Time **80 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **23.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **80 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Minch - Irish Craft Pale Ale Malt | 5 kg (63.8%) | 80 % | 7 |
| Grain | weyermann - abbey malt | 1.5 kg (19.1%) | 75 % | 45 |
| Grain | Weyermann - Pale Wheat Malt | 1 kg (12.8%) | 85 % | 5 |
| Grain | bestmalz - rye | 0.1 kg (1.3%) | 80 % | 6 |
| Grain | Bestmalz - Cara Munich Type I | 0.235 kg (3%) | 75 % | 90 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Dry Hop | Amarillo | 30 g | 3 day(s) | 8.8 % |
| Dry Hop | Citra | 30 g | 3 day(s) | 12.4 % |
| Dry Hop | Mosaic | 30 g | 3 day(s) | 11.7 % |
| Aroma (end of boil) | Jarrylo | 15 g | 5 min | 15 % |
| Aroma (end of boil) | Chinook | 30 g | 5 min | 12.8 % |
| Aroma (end of boil) | Waimea | 30 g | 5 min | 15.1 % |
| Aroma (end of boil) | Cascade | 30 g | 5 min | 6.8 % |
| Aroma (end of boil) | Simcoe | 30 g | 5 min | 13.2 % |

| | | | | |
|------|---------|------|--------|------|
| Boil | Jarrylo | 15 g | 50 min | 15 % |
|------|---------|------|--------|------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 50 ml | Fermentum Mobile |

Notes

- fermentacja roszyła po 30h piwrsze dwa dni 16C, potem buzliwa 20~21C przez 14 dni
Cicha 7dni 20~21C
Cicha 6dni z chmielem na zimno
Cold crush 11C 5dni bez chmielu
Zabutelkowane z 163.6glukozy butelkowanie w 11C reefermentacja w 20C

za duzo karmelu
Mar 19, 2017, 12:59 PM