

Gwaŧ Chmielu 2

- Gravity **18.7 BLG**
- ABV **8.1 %**
- IBU **133**
- SRM **8.5**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **85 min**
- Evaporation rate **10 %/h**
- Boil size **20.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **73 C**, Time **10 min**
- Temp **83 C**, Time **10 min**

Mash step by step

- Heat up **14.6 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **73C**
- Keep mash **10 min** at **83C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **20.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Monachijski | 2 kg (38.5%) | 80 % | 16 |
| Grain | Viking Pilsner malt | 2.7 kg (51.9%) | 82 % | 4 |
| Grain | Caramel/Crystal Malt - 10L | 0.2 kg (3.8%) | 75 % | 20 |
| Grain | Viking Caramel Red | 0.3 kg (5.8%) | 75 % | 60 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Amarillo | 15 g | 70 min | 9.5 % |
| Boil | Citra | 15 g | 70 min | 12 % |
| Boil | Columbus | 15 g | 70 min | 15.5 % |
| Boil | Simcoe | 15 g | 70 min | 13.2 % |
| Boil | Cascade | 15 g | 70 min | 6 % |
| Aroma (end of boil) | Amarillo | 15 g | 10 min | 9.5 % |
| Aroma (end of boil) | Citra | 20 g | 10 min | 12 % |
| Aroma (end of boil) | Columbus | 15 g | 10 min | 15.5 % |
| Aroma (end of boil) | Simcoe | 15 g | 10 min | 13.2 % |

| | | | | |
|---------------------|---------|------|--------|-----|
| Aroma (end of boil) | Cascade | 15 g | 10 min | 6 % |
|---------------------|---------|------|--------|-----|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-------------------------|--------|---------|--------|
| Other | Curacao grapefruit peel | 20 g | Boil | 80 min |