

Grand Champion 2013 (prawie)

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **118**
- SRM **6.8**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **80 min**
- Evaporation rate **6 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **32.2 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **4 min**

Mash step by step

- Heat up **23.5 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **4 min** at **77C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński | 5 kg (51.5%) | 80 % | 3.85 |
| Grain | Strzegom Monachijski typ I | 1 kg (10.3%) | 79 % | 16 |
| Grain | Weyermann pszeniczny jasny | 1 kg (10.3%) | 80 % | 6 |
| Grain | Biscuit Malt | 0.3 kg (3.1%) | 79 % | 45 |
| Sugar | Cukier | 1 kg (10.3%) | 100 % | 0 |
| Grain | Pale Ale | 1.4 kg (14.4%) | 80 % | 7 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Magnum | 50 g | 60 min | 11.2 % |
| Boil | Columbus/Tomahawk/Zeus | 100 g | 30 min | 12.5 % |
| Boil | Simcoe | 25 g | 10 min | 11.4 % |
| Boil | Citra | 25 g | 10 min | 13.5 % |
| Boil | Amarillo | 25 g | 5 min | 8.9 % |
| Boil | Amarillo | 25 g | 2 min | 8.9 % |
| Boil | Simcoe | 25 g | 0 min | 11.4 % |

| | | | | |
|---------|----------|------|----------|--------|
| Dry Hop | Citra | 25 g | 4 day(s) | 13.5 % |
| Dry Hop | Amarillo | 25 g | 4 day(s) | 8.9 % |
| Dry Hop | Simcoe | 25 g | 4 day(s) | 11.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 250 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Water Agent | Chlorek wapnia | 10 g | Boil | 80 min |