

IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **51**
- SRM **5.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Pale Ale/Pils Crisp | 5 kg (71.4%) | 81 % | 5 |
| Grain | Strzegom Monachijski typ I | 2 kg (28.6%) | 81 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 16.6 % |
| Boil | Magnum | 15 g | 40 min | 11 % |
| Boil | Centennial PL | 20 g | 20 min | 6.2 % |
| Boil | Centennial PL | 20 g | 15 min | 6.2 % |
| Boil | Chinook PL | 10 g | 10 min | 7.6 % |
| Aroma (end of boil) | Chinook PL | 10 g | 0 min | 7.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale | Dry | 11 g | --- |