

14. Zrzut chmieli

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **85**
- SRM **4.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12.5 %/h**
- Boil size **25.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 2.9 kg (46%) | 79 % | 6 |
| Grain | Pszeniczny | 0.5 kg (7.9%) | 81 % | 4 |
| Grain | Pilzneński | 2.9 kg (46%) | 81 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Challenger | 50 g | 60 min | 8 % |
| Boil | Target | 33 g | 60 min | 9 % |
| Aroma (end of boil) | Citra | 25 g | 5 min | 12 % |
| Aroma (end of boil) | Amarillo | 25 g | 5 min | 9.5 % |
| Whirlpool | Citra | 25 g | 0 min | 12 % |
| Whirlpool | Amarillo | 25 g | 0 min | 9.5 % |
| Whirlpool | Citra | 50 g | 2 min | 12 % |
| Dry Hop | Amarillo | 50 g | 2 day(s) | 9.5 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------|--------|---------|--------|
| Flavor | trawa cytrynowa | 20 g | Boil | 10 min |