

Plan XXX letni

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **32**
- SRM **5.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **55 C**, Time **30 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **30 min** at **55C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 4 kg (72.7%) | 79 % | 6 |
| Grain | wędzony torfem | 1 kg (18.2%) | 79 % | 4 |
| Grain | Melanoiden Malt | 0.5 kg (9.1%) | 80 % | 39 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil | Amarillo | 30 g | 60 min | 9.5 % |
| Boil | Amarillo | 20 g | 5 min | 9.5 % |
| Dry Hop | Cascade | 100 g | 7 day(s) | 6 % |