

ryżowa apa

- Gravity **11.8 BLG**
- ABV ---
- IBU **40**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 4 kg (90.9%) | 80 % | 4 |
| Adjunct | płatki ryżowe | 0.4 kg (9.1%) | 60 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Amarillo | 30 g | 30 min | 9.5 % |
| Boil | Amarillo | 30 g | 10 min | 9.5 % |
| Boil | Amarillo | 40 g | 0 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|-------|--------|------------|
| us 5 | Ale | Slant | 200 ml | --- |