

Jakieś Jasne

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **36**
- SRM **3.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------|----------------|-------|-----|
| Grain | Pilzneński | 4.2 kg (91.3%) | 81 % | 4 |
| Grain | Pszeniczny | 0.4 kg (8.7%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|--------|------------|
| Boil | Magnum | 15 g | 60 min | 12.5 % |
| Boil | Zula | 20 g | 10 min | 10.6 % |
| Whirlpool | Zula | 30 g | 10 min | 10.6 % |

Yeasts

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