

polska apa

- Gravity **13.3 BLG**
- ABV ---
- IBU **42**
- SRM **6.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **6 %**
- Size with trub loss **26.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **33.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Pilzneński | 5 kg (76.9%) | 81 % | 4 |
| Grain | Pszeniczny | 1 kg (15.4%) | 85 % | 4 |
| Grain | Caramel/Crystal Malt - 30L | 0.5 kg (7.7%) | 75 % | 40 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|----------|------------|
| Boil | lunga | 40 g | 60 min | 11.4 % |
| Aroma (end of boil) | lunga | 30 g | 0 min | 11.4 % |
| Dry Hop | lunga | 30 g | 5 day(s) | 11.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g | Boil | 10 min |