

Komunijne

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **22**
- SRM **5.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **32 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **42.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **21.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **27.8 liter(s)** of **76C** water or to achieve **42.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 5 kg (69%) | 80 % | 7 |
| Grain | Karmelowy Jasny 30EBC | 0.25 kg (3.4%) | 75 % | 30 |
| Grain | Pilzeński | 2 kg (27.6%) | 80 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Cascade | 30 g | 50 min | 6 % |
| Boil | Cascade | 15 g | 25 min | 6 % |
| Boil | Cascade | 15 g | 5 min | 6 % |
| Boil | Centennial | 15 g | 10 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|-------|--------|------------|
| Bulldog universal ale | Ale | Slant | 500 ml | Bulldog |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------|--------|---------|--------|
| Water Agent | Gips | 2 g | Mash | 60 min |

| | | | | |
|--------|---------|-------|------|--------|
| Fining | Karagen | 2.5 g | Boil | 10 min |
| Other | pożywka | 2 g | Boil | 5 min |