

Se ipka

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **33**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **52 C**, Time **5 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Pilzneński | 3.7 kg (62.7%) | 81 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (6.8%) | 60 % | 3 |
| Grain | Carahell | 0.1 kg (1.7%) | 77 % | 26 |
| Grain | Pszeniczny | 1.2 kg (20.3%) | 85 % | 4 |
| Grain | Simpsons - Golden Naked Oats | 0.5 kg (8.5%) | 73 % | 20 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------------------|--------|--------|------------|
| Boil | Citra | 10 g | 10 min | 12 % |
| Boil | Centennial | 10 g | 10 min | 10.5 % |
| Boil | Chinook | 15 g | 10 min | 13 % |
| Whirlpool | Citra chinook centennial | 145 g | 1 min | 1 % |
| Boil | Marynka | 25 g | 60 min | 8 % |