

WKPD 2017

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **39**
- SRM **4.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Pilzneński Premium | 4 kg (56.3%) | 81 % | 2.5 |
| Grain | Briess - Pale Ale Malt | 2.5 kg (35.2%) | 80 % | 7 |
| Grain | Pszeniczny | 0.6 kg (8.5%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Citra | 17 g | 20 min | 12 % |
| Boil | Amarillo | 17 g | 20 min | 9.5 % |
| Boil | Simcoe | 17 g | 20 min | 13.2 % |
| Boil | Citra | 17 g | 5 min | 12 % |
| Boil | Amarillo | 17 g | 5 min | 9.5 % |
| Boil | Simcoe | 17 g | 5 min | 13.2 % |
| Aroma (end of boil) | Citra | 17 g | 0 min | 12 % |
| Aroma (end of boil) | Amarillo | 17 g | 0 min | 9.5 % |
| Aroma (end of boil) | Simcoe | 17 g | 0 min | 13.2 % |
| Whirlpool | Citra | 17 g | 20 min | 12 % |
| Whirlpool | Amarillo | 17 g | 20 min | 9.5 % |

| | | | | |
|-----------|----------|------|----------|--------|
| Whirlpool | Simcoe | 17 g | 20 min | 13.2 % |
| Dry Hop | Citra | 34 g | 4 day(s) | 12 % |
| Dry Hop | Amarillo | 34 g | 4 day(s) | 9.5 % |
| Dry Hop | Simcoe | 34 g | 4 day(s) | 13.2 % |

Yeasts

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