

NE PA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **46**
- SRM **3.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **21.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **66 C**, Time **55 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **55 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pilzneński | 4.3 kg (76.8%) | 81 % | 4 |
| Grain | Płatki owsiane | 1 kg (17.9%) | 85 % | 3 |
| Grain | Płatki pszeniczne | 0.3 kg (5.4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Simcoe | 10 g | 50 min | 13.2 % |
| Boil | Amarillo | 10 g | 50 min | 9.5 % |
| Boil | Simcoe | 10 g | 15 min | 13.2 % |
| Boil | Amarillo | 10 g | 15 min | 9.5 % |
| Aroma (end of boil) | Simcoe | 10 g | 0 min | 13.2 % |
| Aroma (end of boil) | Amarillo | 10 g | 0 min | 9.5 % |
| Whirlpool | Simcoe | 20 g | 15 min | 13.2 % |
| Whirlpool | Amarillo | 20 g | 15 min | 9.5 % |
| Dry Hop | Simcoe | 50 g | 3 day(s) | 13.2 % |
| Dry Hop | Amarillo | 25 g | 3 day(s) | 9.5 % |
| Dry Hop | Simcoe | 50 g | 2 day(s) | 13.2 % |

| | | | | |
|---------|-----------|------|----------|-------|
| Dry Hop | Amarillo | 25 g | 2 day(s) | 9.5 % |
| Dry Hop | El Dorado | 50 g | 2 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------|------|-------|--------|------------|
| wlp066 | Ale | Slant | 200 ml | --- |