

NEPA

- Gravity **12.9 BLG**
- ABV ---
- IBU **39**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.2 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **0 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.6 kg (75.4%) | 80 % | 5 |
| Grain | Słód owsiany Fawcett | 0.75 kg (12.3%) | 61 % | 5 |
| Grain | Płatki owsiane | 0.75 kg (12.3%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-----------|--------|----------|------------|
| Boil | Magnum | 30 g | 60 min | 13.5 % |
| Whirlpool | El Dorado | 25 g | 5 min | 15 % |
| Whirlpool | Galaxy | 25 g | 5 min | 15 % |
| Whirlpool | Mosaic | 25 g | 5 min | 10 % |
| Dry Hop | El Dorado | 25 g | 7 day(s) | 15 % |
| Dry Hop | Galaxy | 25 g | 7 day(s) | 15 % |
| Dry Hop | Mosaic | 25 g | 7 day(s) | 10 % |
| Dry Hop | El Dorado | 50 g | 3 day(s) | 15 % |
| Dry Hop | Galaxy | 50 g | 3 day(s) | 15 % |
| Dry Hop | Mosaic | 50 g | 3 day(s) | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |