

NE IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **31**
- SRM **5.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński | 5.5 kg (87.3%) | 81 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (7.9%) | 60 % | 3 |
| Grain | Abbey Malt Weyermann | 0.3 kg (4.8%) | 75 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Simcoe | 15 g | 60 min | 13.2 % |
| Aroma (end of boil) | Simcoe | 20 g | 5 min | 13.2 % |
| Aroma (end of boil) | Amarillo | 10 g | 5 min | 9.5 % |
| Aroma (end of boil) | Cascade | 10 g | 5 min | 6 % |
| Aroma (end of boil) | Centennial | 10 g | 5 min | 10.5 % |
| Whirlpool | Centennial | 50 g | 1 min | 10.5 % |
| Whirlpool | Citra | 20 g | 0 min | 12 % |
| Whirlpool | Simcoe | 20 g | 0 min | 13.2 % |
| Whirlpool | Amarillo | 10 g | 0 min | 9.5 % |

| | | | | |
|-----------|------------|------|----------|--------|
| Whirlpool | Cascade | 10 g | 0 min | 6 % |
| Dry Hop | Centennial | 50 g | 3 day(s) | 10.5 % |
| Dry Hop | Simcoe | 30 g | 3 day(s) | 13.2 % |
| Dry Hop | Citra | 20 g | 3 day(s) | 12 % |
| Dry Hop | Amarillo | 20 g | 3 day(s) | 9.5 % |
| Dry Hop | Cascade | 20 g | 3 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 300 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------------------------|--------|---------|-------|
| Water Agent | chlorek wapnia 33% | 5 g | Mash | 1 min |
| Water Agent | kwask fosforowy | 3 g | Mash | 1 min |
| Water Agent | sol epsom | 1 g | Mash | 1 min |
| Water Agent | kwask fosforowy - wysladzanie | 2 g | Mash | 1 min |