

Osiemnastka

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **48**
- SRM **5.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **28.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **30.8 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **21.2 liter(s)** of **76C** water or to achieve **34.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (45.5%) | 80 % | 5 |
| Grain | Viking Pilsner malt | 2 kg (22.7%) | 82 % | 4 |
| Grain | Strzegom Wiedeński | 2 kg (22.7%) | 79 % | 10 |
| Grain | Płatki owsiane | 0.4 kg (4.5%) | 60 % | 3 |
| Grain | Płatki jęczmienne | 0.4 kg (4.5%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | columbus | 20 g | 60 min | 12.9 % |
| Boil | Warrior | 20 g | 60 min | 13.5 % |
| Boil | Columbus | 20 g | 10 min | 12.9 % |
| Whirlpool | columbus | 10 g | 10 min | 12.9 % |
| Dry Hop | Mosaic | 100 g | 4 day(s) | 11.9 % |
| Dry Hop | talus | 100 g | 4 day(s) | 7.4 % |
| Dry Hop | Ekuanot | 100 g | 4 day(s) | 12.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------|-----|-----|------|-----|
| us-05 | Ale | Dry | 23 g | --- |
|-------|-----|-----|------|-----|