

Foggy IPA / APA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **28**
- SRM **3.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **66 liter(s)**
- Trub loss **1 %**
- Size with trub loss **71.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **81.2 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **46.5 liter(s)**
- Total mash volume **62 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **46.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **50.2 liter(s)** of **76C** water or to achieve **81.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|-----------------|-------|-----|
| Grain | Viking Pilsner malt | 11.5 kg (74.2%) | 82 % | 4 |
| Grain | płatki ryżowe | 2 kg (12.9%) | 85 % | 2 |
| Grain | Pszeniczny | 1.5 kg (9.7%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (3.2%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------------------|--------|--------|------------|
| Boil | lunga | 30 g | 60 min | 12.4 % |
| Whirlpool | Cascade 90C -30min | 100 g | 30 min | 7 % |
| Whirlpool | Cascade 80C - 20 min | 100 g | 20 min | 7 % |