

## XII

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **60**
- SRM **5.7**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **25.2 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **20.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (69.4%)  | 80 %  | 5   |
| Grain | Pszeniczny           | 1 kg (13.9%)  | 85 %  | 4   |
| Grain | Biscuit Malt         | 0.5 kg (6.9%) | 79 %  | 45  |
| Grain | Płatki pszeniczne    | 0.5 kg (6.9%) | 85 %  | 3   |
| Grain | Płatki owsiane       | 0.2 kg (2.8%) | 85 %  | 3   |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | lunga    | 30 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Cascade  | 20 g   | 10 min   | 6 %        |
| Whirlpool           | Cascade  | 80 g   | 30 min   | 6 %        |
| Whirlpool           | Amarillo | 50 g   | 30 min   | 9.5 %      |
| Dry Hop             | Mosaic   | 100 g  | 2 day(s) | 10 %       |

### Yeasts

| Name            | Type | Form   | Amount  | Laboratory |
|-----------------|------|--------|---------|------------|
| FM53 Voss kveik | Ale  | Liquid | 1500 ml | FM         |