

# XI

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **48**
- SRM **5.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.5 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 **21.7 liter(s)** of **76C** water or to achieve **32.5 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    | 20 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Amarillo | 10 g   | 5 min    | 9.5 %      |
| Aroma (end of boil) | Citra    | 10 g   | 5 min    | 12 %       |
| Whirlpool           | Amarillo | 40 g   | 30 min   | 9.5 %      |
| Whirlpool           | Citra    | 40 g   | 30 min   | 12 %       |
| Dry Hop             | Citra    | 50 g   | 2 day(s) | 12 %       |
| Dry Hop             | Amarillo | 50 g   | 2 day(s) | 9.5 %      |

## Yeasts

| Name            | Type | Form   | Amount  | Laboratory |
|-----------------|------|--------|---------|------------|
| FM53 Voss kveik | Ale  | Liquid | 2000 ml | FM         |