

# Hamburger

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **55**
- SRM **4.4**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **2 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

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

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pale Ale Viking   | 1.5 kg (33.3%) | 80 %  | 5   |
| Grain | Pszeniczny Viking | 0.5 kg (11.1%) | 85 %  | 4   |
| Grain | Żytni Weyermann   | 2 kg (44.4%)   | 85 %  | 8   |
| Grain | Płatki owsiane    | 0.5 kg (11.1%) | 60 %  | 3   |

## Hops

| Use for | Name        | Amount | Time     | Alpha acid |
|---------|-------------|--------|----------|------------|
| Boil    | Magnat      | 50 g   | 30 min   | 12.4 %     |
| Dry Hop | EXP 2/20    | 50 g   | 3 day(s) | 9.3 %      |
| Dry Hop | EXP 3/20    | 50 g   | 3 day(s) | 9.3 %      |
| Dry Hop | Zula        | 50 g   | 3 day(s) | 10.6 %     |
| Dry Hop | Amora Preta | 100 g  | 3 day(s) | 9 %        |
| Dry Hop | Zombie      | 100 g  | 3 day(s) | 9.8 %      |

## Yeasts

| Name                         | Type | Form  | Amount | Laboratory |
|------------------------------|------|-------|--------|------------|
| WLP521 - Hornindal Kveik Ale | Ale  | Slant | 200 ml | ---        |