

AW

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **31**
- SRM **3.5**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **45 min**
- Evaporation rate **10 %/h**
- Boil size **13 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.6 liter(s)**
- Total mash volume **8.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **6.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **13 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1.2 kg (54.5%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (45.5%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| First Wort | Marynka | 9 g | 45 min | 7.4 % |
| Boil | Citra | 8 g | 10 min | 12.5 % |
| Boil | Mosaic | 8 g | 10 min | 13.2 % |
| Aroma (end of boil) | Citra | 10 g | 0 min | 12.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|------|--------|---------|-------------|
| Wyeast - German Ale | Ale | Liquid | 1200 ml | Wyeast Labs |