

appa

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **2**
- SRM **3.9**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **39.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **23.6 liter(s)** of **76C** water or to achieve **39.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (50%) | 80 % | 5 |
| Grain | Strzegom Pilzneński | 1.7 kg (21.3%) | 80 % | 4 |
| Grain | Pszeniczny | 1 kg (12.5%) | 85 % | 4 |
| Grain | Pszenica niesłodowana | 0.5 kg (6.3%) | 75 % | 3 |
| Grain | Płatki pszeniczne | 0.5 kg (6.3%) | 85 % | 3 |
| Grain | Słód owsiany Fawcett | 0.3 kg (3.8%) | 61 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------|--------|----------|------------|
| Aroma (end of boil) | sabro | 30 g | 1 min | 14.8 % |
| Aroma (end of boil) | Nelson Sauvín | 30 g | 1 min | 11 % |
| Dry Hop | Citra | 30 g | 2 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale | Slant | 300 ml | --- |