

Ołtajn

- Gravity **27.9 BLG**
- ABV **13.4 %**
- IBU **60**
- SRM **9.8**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **40 C**, Time **15 min**
- Temp **50 C**, Time **20 min**
- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **42.5C**
- Add grains
- Keep mash **15 min** at **40C**
- Keep mash **20 min** at **50C**
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **-4.2 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|--------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (56%) | 80 % | 5 |
| Grain | Słód owsiany Fawcett | 1 kg (16%) | 61 % | 5 |
| Grain | Płatki owsiane | 1 kg (16%) | 60 % | 3 |
| Grain | Abbey Malt Weyermann | 0.5 kg (8%) | 75 % | 45 |
| Sugar | Milk Sugar (Lactose) | 0.25 kg (4%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Chinook | 25 g | 60 min | 13 % |
| Boil | Chinook | 25 g | 15 min | 13 % |
| Aroma (end of boil) | Fuggles | 10 g | 10 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|-------|--------|------------|
| Fermentis US-05 | Ale | Slant | 200 ml | Fermentis |