

## west

---

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **72**
- SRM **3.3**

### Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **60.4 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **40.5 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **31.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **0 min** at **78C**
- Sparge using **37.9 liter(s)** of **76C** water or to achieve **60.4 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount       | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (55.6%) | 80 %  | 5   |
| Grain | Viking Pilsner malt  | 3 kg (33.3%) | 82 %  | 4   |
| Grain | Oats, Flaked         | 1 kg (11.1%) | 80 %  | 2   |

### Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | Zula               | 100 g  | 60 min | 10.6 %     |
| Aroma (end of boil) | hellertauer magnum | 100 g  | 1 min  | 11.8 %     |
| Boil                | Centennial         | 100 g  | 10 min | 9 %        |

### Yeasts

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