

## w18

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **17**
- SRM **30.4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **24.8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.4 liter(s)**

### Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

### Steps

- Temp **69 C**, Time **60 min**

### Mash step by step

- Heat up **19.8 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **31.4 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt        | 5 kg (65.8%)  | 80 %  | 5    |
| Grain | Weyermann - Carapils        | 0.1 kg (1.3%) | 78 %  | 4    |
| Grain | Carared                     | 0.2 kg (2.6%) | 75 %  | 39   |
| Grain | Jęczmień palony             | 0.3 kg (3.9%) | 55 %  | 985  |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (2.6%) | 68 %  | 1200 |
| Grain | Strzegom Czekoladowy jasny  | 0.4 kg (5.3%) | 68 %  | 400  |
| Grain | Płatki owsiane              | 0.4 kg (5.3%) | 60 %  | 3    |
| Sugar | Milk Sugar (Lactose)        | 1 kg (13.2%)  | 1 %   | 0    |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | lunga             | 15 g   | 60 min | 9.4 %      |
| Boil    | Lublin (Lubelski) | 10 g   | 60 min | 6 %        |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 100 ml | Fermentis  |