

## Forest light

- Gravity **7.6 BLG**
- ABV **2.9 %**
- IBU **33**
- SRM **7.4**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **31 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **39.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **81.8C**
- Add grains
- Keep mash **40 min** at **73C**
- Keep mash **5 min** at **78C**
- Sparge using **30.6 liter(s)** of **76C** water or to achieve **39.6 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 2 kg (44.4%)   | 85 %  | 7   |
| Grain | Carahell                  | 0.5 kg (11.1%) | 77 %  | 26  |
| Grain | Żytni                     | 1 kg (22.2%)   | 85 %  | 8   |
| Grain | Karmelowy żytni Strzegom  | 0.5 kg (11.1%) | 75 %  | 150 |
| Grain | Oats, Flaked              | 0.5 kg (11.1%) | 80 %  | 2   |

### Hops

| Use for             | Name          | Amount | Time   | Alpha acid |
|---------------------|---------------|--------|--------|------------|
| Boil                | Simcoe        | 15 g   | 30 min | 13.2 %     |
| Boil                | Citra         | 10 g   | 15 min | 13 %       |
| Boil                | Mosaic        | 10 g   | 15 min | 11.5 %     |
| Boil                | Nelson Sauvin | 10 g   | 15 min | 11 %       |
| Boil                | Amarillo      | 10 g   | 15 min | 8.8 %      |
| Aroma (end of boil) | Citra         | 10 g   | 1 min  | 12 %       |
| Aroma (end of boil) | Mosaic        | 10 g   | 1 min  | 10 %       |
| Aroma (end of boil) | Nelson Sauvin | 10 g   | 1 min  | 11 %       |
| Aroma (end of boil) | Amarillo      | 10 g   | 1 min  | 9.5 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |

## Extras

| Type        | Name           | Amount | Use for | Time    |
|-------------|----------------|--------|---------|---------|
| Water Agent | gips           | 4 g    | Mash    | 100 min |
| Fining      | Mech Irlandzki | 4 g    | Boil    | 5 min   |

## Notes

- Starter uwodnionych drożdży (6 h).  
*Jun 17, 2017, 9:16 PM*