

## Lab #4 - Wybrzeźnik Zachodni

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- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **64**
- SRM **4.7**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **19 %/h**
- Boil size **14.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **14.6 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **11.4 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **14.9 liter(s)** of wort

### Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Pilzneński               | 1.5 kg (46.2%) | 81 %  | 4   |
| Grain | Pale Ale Strzegom        | 1.5 kg (46.2%) | 80 %  | 6   |
| Grain | Słód pszeniczny Bestmalz | 0.25 kg (7.7%) | 82 %  | 5   |

### Hops

| Use for   | Name                   | Amount | Time     | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil      | Columbus/Tomahawk/Zeus | 17.5 g | 60 min   | 12 %       |
| Boil      | Amarillo               | 7.5 g  | 60 min   | 10.1 %     |
| Boil      | lunga                  | 7.5 g  | 30 min   | 11 %       |
| Whirlpool | Ahtanum                | 15 g   | 0 min    | 5 %        |
| Dry Hop   | Talus                  | 20 g   | 3 day(s) | 7.4 %      |
| Dry Hop   | Mosaic                 | 12.5 g | 3 day(s) | 12.1 %     |
| Dry Hop   | Citra                  | 12.5 g | 3 day(s) | 12 %       |

### Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale  | Dry  | 5.5 g  | Fermentis  |

## Extras

| Type        | Name            | Amount | Use for | Time |
|-------------|-----------------|--------|---------|------|
| Water Agent | Gips piwowarski | 5 g    | Mash    | ---  |