

# sztalkwajcen

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **41**
- SRM **21.3**
- Style **Dunkelweizen**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **15.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

## Steps

- Temp **42 C**, Time **120 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **45.7C**
- Add grains
- Keep mash **120 min** at **42C**
- Keep mash **60 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

## Fermentables

| Type    | Name                      | Amount         | Yield | EBC |
|---------|---------------------------|----------------|-------|-----|
| Grain   | Słód pszeniczny           | 2 kg (58.8%)   | 82 %  | 5   |
| Grain   | Weyermann - Pale Ale Malt | 1.2 kg (35.3%) | 85 %  | 7   |
| Adjunct | Rice Hulls                | 0 kg           | 10 %  | 0   |
| Grain   | Weyermann - Carafa II     | 0.05 kg (1.5%) | 70 %  | 837 |
| Grain   | Jęczmień palony           | 0.15 kg (4.4%) | 55 %  | 985 |

## Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Warrior  | 10 g   | 90 min   | 15.5 %     |
| Whirlpool | Warrior  | 20 g   | 15 min   | 15.5 %     |
| Dry Hop   | Citra    | 25 g   | 3 day(s) | 12 %       |
| Dry Hop   | Cascade  | 25 g   | 3 day(s) | 6 %        |
| Dry Hop   | Amarillo | 25 g   | 3 day(s) | 9.5 %      |
| Dry Hop   | Mosaic   | 25 g   | 3 day(s) | 10 %       |

## Yeasts

| Name                   | Type  | Form  | Amount | Laboratory       |
|------------------------|-------|-------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Slant | 300 ml | Fermentum Mobile |