

# DWA

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **26**
- SRM **30.3**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **11.4 liter(s)**

## Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **8.1 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

| Type  | Name                            | Amount         | Yield  | EBC  |
|-------|---------------------------------|----------------|--------|------|
| Grain | Pilzneński                      | 2 kg (54.8%)   | 81 %   | 4    |
| Grain | Płatki owsiane                  | 0.35 kg (9.6%) | 85 %   | 3    |
| Grain | Pale Cookie VM                  | 0.35 kg (9.6%) | 80 %   | 30   |
| Grain | Strzegom Karmel 150             | 0.1 kg (2.7%)  | 75 %   | 150  |
| Sugar | Milk Sugar (Lactose)            | 0.4 kg (11%)   | 76.1 % | 0    |
| Grain | Weyermann - Dehusked Carafa III | 0.1 kg (2.7%)  | 70 %   | 1024 |
| Grain | Weyermann - Chocolate Wheat     | 0.15 kg (4.1%) | 74 %   | 788  |
| Grain | Castle Cafe                     | 0.2 kg (5.5%)  | 75.5 % | 480  |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 22 g   | 60 min | 7.4 %      |