

## DRY STOUT (MAŁA WARKA)

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **40**
- SRM **35.9**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **16 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **12.4 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount          | Yield | EBC  |
|-------|----------------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale                  | 2.05 kg (57.7%) | 80 %  | 6    |
| Grain | Viking Monachijski Ciemny        | 0.68 kg (19.2%) | 80 %  | 22   |
| Grain | Płatki jęczmienne (błyskawiczne) | 0.34 kg (9.6%)  | 60 %  | 4    |
| Grain | Weyermann Pszeniczny Czekoladowy | 0.2 kg (5.8%)   | 68 %  | 1000 |
| Grain | Weyermann Carafa III Special     | 0.14 kg (3.8%)  | 70 %  | 1400 |
| Grain | Weyermann Jęczmień palony        | 0.14 kg (3.8%)  | 55 %  | 1000 |

### Hops

| Use for | Name               | Amount  | Time   | Alpha acid |
|---------|--------------------|---------|--------|------------|
| Boil    | East Kent Goldings | 40.91 g | 60 min | 6.3 %      |

### Yeasts

| Name        | Type | Form | Amount  | Laboratory |
|-------------|------|------|---------|------------|
| Safale S-04 | Ale  | Dry  | 15.68 g | Fermentis  |