# 88

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **37**
- SRM **39.8**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **19.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

- Temp **60 C**, Time **0 min**
- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **0 min** at **60C**
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **19.5 liter(s)** of wort

## Fermentables

| Type | Name | Amount | Yield | EBC |
|---|---|---|---|---|
| Grain | Viking Pale Ale malt | 3.5 kg *(62.5%)* | 80 % | 5 |
| Grain | Pilzneński | 0.5 kg *(8.9%)* | 81 % | 4 |
| Grain | Słód Caramunich Typ II Weyermann | 0.5 kg *(8.9%)* | 73 % | 120 |
| Grain | Jęczmień palony | 0.5 kg *(8.9%)* | 55 % | 985 |
| Grain | Carafa II | 0.1 kg *(1.8%)* | 70 % | 812 |
| Grain | Płatki owsiane | 0.5 kg *(8.9%)* | 85 % | 3 |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---|---|---|---|---|
| Boil | Marynka | 30 g | 75 min | 10 % |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|---|---|---|---|---|
| Gozdawa Pure Ale Yeast 7 | Ale | Dry | 20 g | --- |

## Extras

| Type | Name | Amount | Use for | Time |
|---|---|---|---|---|
| Flavor | Laktoza | 250 g | Boil | 15 min |
| Water Agent | Kawa | 250 g | Boil | 15 min |