

Mild

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **14**
- SRM **18.9**
- Style **Mild**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **16.2 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 1.8 kg (44.4%) | 80 % | 5 |
| Grain | Viking Vienna Malt | 1.8 kg (44.4%) | 79 % | 7 |
| Grain | Strzegom Karmel 300 | 0.3 kg (7.4%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy ciemny | 0.15 kg (3.7%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 10 g | 60 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|--------|--------|------------------|
| FM11 Wichrowe Wzgórza | Ale | Liquid | 100 ml | Fermentum Mobile |