

Wędzone

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **69**
- SRM **52.7**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.7 liter(s)**
- Total mash volume **35.6 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **26.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|------|
| Grain | Viking Malt Wędzony Olchą | 1 kg (11.2%) | 82 % | 10 |
| Grain | Viking Malt Wędzony Jabłoń | 1 kg (11.2%) | 82 % | 10 |
| Grain | Viking Malt Wędzony gruszą | 1 kg (11.2%) | 82 % | 10 |
| Grain | Viking Malt Wędzony brzozą | 1 kg (11.2%) | 82 % | 10 |
| Grain | Viking Malt Wędzony wiśnią | 1 kg (11.2%) | 82 % | 10 |
| Grain | Viking Pale Ale malt | 1 kg (11.2%) | 80 % | 5 |
| Grain | żyto prażone | 0.25 kg (2.8%) | 55 % | 1000 |
| Grain | Strzegom pszenica prażona | 0.25 kg (2.8%) | 70 % | 1000 |
| Grain | Jęczmień palony | 0.25 kg (2.8%) | 55 % | 985 |
| Grain | Simpsons - Roasted Barley | 0.25 kg (2.8%) | 70 % | 1084 |
| Grain | Black fawcett | 0.25 kg (2.8%) | 55 % | 1400 |
| Grain | Fawcett - Pale Chocolate | 0.25 kg (2.8%) | 71 % | 1100 |

| | | | | |
|-------|-----------------------------|---------------|------|----|
| Grain | Płatki owsiane | 0.4 kg (4.5%) | 85 % | 3 |
| Grain | Strzegom Monachijski typ II | 1 kg (11.2%) | 79 % | 22 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | lunga | 50 g | 60 min | 9.5 % |
| Boil | East Kent Goldings | 50 g | 30 min | 5.1 % |
| Boil | Fuggles | 50 g | 30 min | 4.5 % |
| Aroma (end of boil) | Fuggles | 50 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 23 g | --- |