

Kveik FES

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **45**
- SRM **35.1**
- Style **Foreign Extra 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 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **65 C**, Time **70 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **7.5 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|-----------------|-------|------|
| Grain | Viking Malt Pilzneński | 3.18 kg (55%) | 80 % | 3.75 |
| Grain | Viking Malt Wiedeński | 0.69 kg (11.9%) | 79 % | 8.5 |
| Grain | Viking Malt Pale Ale | 0.6 kg (10.4%) | 79 % | 6.25 |
| Grain | Viking Malt Żytni | 0.49 kg (8.5%) | 75 % | 9 |
| Grain | Wyereman Pszeniczny Czekoladowy | 0.25 kg (4.3%) | 65 % | 1050 |
| Grain | Viking Malt Czekoladowy Jasny | 0.21 kg (3.6%) | 68 % | 400 |
| Grain | Viking Malt Pszeniczny | 0.18 kg (3.1%) | 82 % | 5 |
| Grain | Viking Malt Pszczenica Prażona | 0.15 kg (2.6%) | 65 % | 1100 |
| Grain | Viking Malt Caramel Aromatic | 0.02 kg (0.3%) | 75 % | 180 |
| Grain | Viking Malt Karmelowy 300 | 0.01 kg (0.2%) | 70 % | 300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------|--------|--------|------------|
| Boil | Lubelski 2016 | 20 g | 60 min | 4 % |

| | | | | |
|------|------------|------|--------|--------|
| Boil | Zeus 2016 | 15 g | 60 min | 14.4 % |
| Boil | Junga 2017 | 10 g | 60 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|-------|--------|------------|
| FM53 Voss kveik | Ale | Slant | 250 ml | FM |