FES

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **50**
- SRM **39.6**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **13.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **3.1 liter(s)** of **76C** water or to achieve **13.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep@ Pils	2.4 kg *(60%)*	82 %	4
Grain	Viking Monach II	0.6 kg *(15%)*	79 %	20
Grain	Oats, Flaked	0.4 kg *(10%)*	80 %	2
Grain	Weyermann pszeniczny czekoladowy	0.25 kg *(6.3%)*	65 %	1050
Grain	Viking Caramel Sweet	0.15 kg *(3.8%)*	75 %	62
Grain	Viking Barwiący	0.1 kg *(2.5%)*	65 %	1400
Grain	Castlemalting Chateau Biscuit	0.1 kg *(2.5%)*	77 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Iunga Polish Hops	18 g	60 min	10 %
Boil	Sybilla Polish Hops	25 g	30 min	4.6 %

Yeasts

Name	Type	Form	Amount	Laboratory

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Kveik Stranda	Ale	Slant	30 ml	---