Forest stout

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **52**
- SRM **44.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg *(82.4%)*	80 %	5
Grain	Special B Malt	0.1 kg *(2.4%)*	65.2 %	315
Grain	Jęczmień palony	0.5 kg *(11.8%)*	55 %	985
Grain	Caraaroma	0.15 kg *(3.5%)*	78 %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	30 g	60 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M12 Voss Kveik	Ale	Slant	100 ml	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Flavor	pędy świerku	250 g	Boil	5 min
Flavor	pędy świerku	250 g	Secondary	3 day(s)
na CC 1*C przez 3 dni				

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