smoked stout

- Gravity **18.2 BLG**
- ABV **---**
- IBU **33**
- SRM **40**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **21.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **54 C**, Time **20 min**
- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **20 min** at **54C**
- Keep mash **45 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **21.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	steinbach smoked malt	3 kg *(60%)*	--- %	5
Grain	pilzeński	1.5 kg *(30%)*	80.5 %	2
Grain	czekoladowy	0.5 kg *(10%)*	60 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Marynka	10 g	45 min	10 %
Boil	Marynka	10 g	30 min	10 %
Boil	Fuggles	10 g	15 min	4.5 %
Aroma (end of boil)	Fuggles	10 g	5 min	4.5 %
Dry Hop	Fuggles	10 g	3 day(s)	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
saf	Ale	Dry	11.5 g	---

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

Extras

Type	Name	Amount	Use for	Time
Flavor	wióry dębowe	200 g	Primary	3 day(s)