#27 Hoppy Smoked Rye Ale

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **40**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg *(42.6%)*	79 %	6
Grain	Żytni	1.1 kg *(23.4%)*	85 %	8
Grain	Słód Wędzony Steinbach	1.2 kg *(25.5%)*	80 %	5
Grain	Rye, Flaked	0.4 kg *(8.5%)*	78.3 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	10 g	60 min	9.5 %
Boil	Amarillo	20 g	30 min	9.5 %
Boil	Amarillo	30 g	10 min	9.5 %
Whirlpool	Amarillo	30 g	0 min	9.5 %
Dry Hop	Amarillo	60 g	4 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

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