

## #75 Smoky Rye IPA

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **40**
- SRM **4.6**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

### Steps

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

### Mash step by step

- Heat up **16.2 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 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (55.6%)	80 %	5
Grain	Słód Wędzony Steinbach	1 kg (18.5%)	80 %	5
Grain	Żytni	1 kg (18.5%)	85 %	8
Grain	Płatki owsiane	0.4 kg (7.4%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	30 g	60 min	9.5 %
Boil	Amarillo	30 g	10 min	9.5 %
Aroma (end of boil)	Amarillo	40 g	0 min	9.5 %
Dry Hop	Amarillo	100 g	5 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	120 ml	Fermentum Mobile