

# Smoked Stout Trooper

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **47**
- SRM **60.5**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **11.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **19 %/h**
- Boil size **14.5 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Wędzony Steinbach	2.5 kg (59.5%)	80 %	5
Grain	Płatki owsiane	0.6 kg (14.3%)	75 %	3
Grain	Special B Malt (Castle)	0.3 kg (7.1%)	65.2 %	350
Grain	Special W Malt (Castle)	0.3 kg (7.1%)	65.2 %	350
Grain	Carafa Special III	0.2 kg (4.8%)	65 %	1400
Grain	Pszeniczny Czekoladowy	0.2 kg (4.8%)	73 %	1000
Grain	Jęczmień palony (Castle)	0.1 kg (2.4%)	55 %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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WLP099 - Super High Gravity Ale Yeast	Ale	Liquid	135 ml	White Labs
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