stout Jesienny

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **32**
- SRM **35.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **18.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **11.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **18.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2 kg *(52.6%)*	85 %	7
Grain	Pszeniczny	0.5 kg *(13.2%)*	85 %	4
Grain	Pilzneński	0.5 kg *(13.2%)*	81 %	3
Grain	pszeniczny czekoladowy Weyermann®	0.1 kg *(2.6%)*	65 %	1100
Grain	Jęczmień palony	0.1 kg *(2.6%)*	55 %	1100
Grain	Special B Malt	0.2 kg *(5.3%)*	65.2 %	315
Grain	Caraaroma	0.2 kg *(5.3%)*	78 %	400
Grain	Weyermann - Carafa I	0.2 kg *(5.3%)*	70 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	60 min	4.5 %