

Chocolate stockings

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **14**
- SRM **69.7**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **8.5 %/h**
- Boil size **14 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 **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **4.6 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.8 kg (80.9%)	80 %	4
Grain	Strzegom Czekoladowy ciemny	0.9 kg (19.1%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	10 g	40 min	10.5 %
Aroma (end of boil)	Equinox	10 g	0 min	13.1 %
Aroma (end of boil)	Mosaic	10 g	0 min	10 %
Dry Hop	Equinox	10 g	10 day(s)	13.1 %
Dry Hop	Mosaic	10 g	10 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale

Extras

Type	Name	Amount	Use for	Time
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Flavor	Laski cynamonu	50 g	Secondary	10 day(s)
Flavor	Kawa parzona	330 g	Secondary	10 day(s)