

FESBERG

- Gravity **14.2 BLG**
- ABV ---
- IBU **39**
- SRM **40**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (76.9%)	80 %	4
Grain	Strzegom Karmel 300	0.5 kg (7.7%)	70 %	299
Grain	Black Barley (Roast Barley)	0.3 kg (4.6%)	55 %	985
Grain	Carafa II	0.2 kg (3.1%)	70 %	812
Grain	Barley, Flaked	0.5 kg (7.7%)	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	55 min	9.5 %
Boil	Cascade	20 g	10 min	6 %
Dry Hop	Marynka	10 g	5 day(s)	10 %
Dry Hop	Cascade	10 g	5 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
white labs 500	Ale	Slant	500 ml	---