

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 | --- |