

FES-Dori

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **33**
- SRM **40**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **4 %**
- Size with trub loss **22.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **32.1 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------|----------------|-------|-----|
| Grain | Pilzneński | 5.5 kg (75.3%) | 81 % | 4 |
| Grain | Caraaroma | 0.5 kg (6.8%) | 78 % | 400 |
| Grain | Carafa 1 | 0.3 kg (4.1%) | 70 % | 664 |
| Grain | Płatki owsiane | 0.5 kg (6.8%) | 85 % | 3 |
| Grain | Jęczmień palony | 0.5 kg (6.8%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Marynka | 40 g | 60 min | 8.8 % |
| Boil | Styrian Golding | 50 g | 5 min | 2.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|------|-------|--------|------------|
| Wyeast - London Ale | Ale | Slant | 150 ml | Wyeast |