

Foreign Extra Stout 3.0

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **51**
- SRM **44.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **16.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **16.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|--------|------|
| Grain | Strzegom Pale Ale | 3 kg (75%) | 79 % | 6 |
| Grain | Strzegom Karmel 300 | 0.15 kg (3.8%) | 70 % | 300 |
| Grain | Castlemalting Cafe | 0.2 kg (5%) | 75.5 % | 500 |
| Grain | Fawcett Chocolate | 0.15 kg (3.8%) | 72 % | 1200 |
| Grain | Carafa Special III | 0.1 kg (2.5%) | 70 % | 1034 |
| Grain | Jęczmień palony | 0.15 kg (3.8%) | 55 % | 985 |
| Grain | Bestmalz Pszeniczny Jasny | 0.25 kg (6.3%) | 82 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Boil | Aurora | 30 g | 60 min | 8.8 % |
| Aroma (end of boil) | Aurora | 20 g | 10 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|---------------------------|-----|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 200 ml | Fermentum Mobile |
|---------------------------|-----|--------|--------|------------------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Fining | Whirfloc | 1.25 g | Boil | 10 min |