

SWEET FES

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **40**
- SRM **36.7**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **27.4 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **67 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **10 min** at **67C**
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|------|
| Grain | Strzegom Pilzneński | 2.9 kg (43.9%) | 80 % | 4 |
| Grain | Monachijski | 1.1 kg (16.7%) | 80 % | 16 |
| Grain | owsiany | 0.7 kg (10.6%) | 80 % | 6 |
| Grain | Płatki żytnie | 0.6 kg (9.1%) | 85 % | 10 |
| Grain | Karmelowy ciemny | 0.3 kg (4.5%) | 75 % | 600 |
| Grain | Strzegom Barwiący | 0.2 kg (3%) | 68 % | 1300 |
| Grain | Jęczmień palony | 0.3 kg (4.5%) | 55 % | 985 |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (7.6%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Admiral | 33 g | 50 min | 14.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 22 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|-----------|----------|
| Flavor | kawa ziarna | 200 g | Secondary | 7 day(s) |
| Flavor | laktoza | 500 g | Boil | 5 min |