

## MILK-COFFEE Vanilla FES#3

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **32**
- SRM **36.3**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **29.1 liter(s)**

### Steps

- Temp **65 C**, Time **65 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **20.8 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **65 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC  |
|-------|----------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt     | 5.5 kg (66.3%) | 80 %  | 7    |
| Grain | Strzegom Karmel 300        | 0.7 kg (8.4%)  | 70 %  | 299  |
| Grain | Strzegom Monachijski typ I | 0.6 kg (7.2%)  | 79 %  | 16   |
| Grain | Strzegom pszenica prażona  | 0.4 kg (4.8%)  | 70 %  | 1000 |
| Grain | Jęczmień palony            | 0.3 kg (3.6%)  | 55 %  | 985  |
| Grain | Płatki owsiane             | 0.4 kg (4.8%)  | 1 %   | 3    |
| Grain | Płatki żytnie              | 0.4 kg (4.8%)  | 1 %   | 3    |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 30 g   | 60 min | 10 %       |
| Boil    | Lublin (Lubelski) | 30 g   | 30 min | 4 %        |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |

## Extras

| Type   | Name       | Amount | Use for   | Time     |
|--------|------------|--------|-----------|----------|
| Flavor | kawa wywar | 700 g  | Secondary | 4 day(s) |
| Flavor | wanilia    | 80 g   | Secondary | 4 day(s) |
| Flavor | laktoza    | 400 g  | Boil      | 15 min   |