

FES z karobem

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **36**
- SRM **29.1**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **1000 liter(s)**
- Trub loss **5 %**
- Size with trub loss **1050 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **1320 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **900 liter(s)**
- Total mash volume **1200 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 150 kg (50%) | 80 % | 5 |
| Grain | Monachijski | 75 kg (25%) | 80 % | 16 |
| Grain | Płatki owsiane z łuską | 30 kg (10%) | 85 % | 3 |
| Grain | Żytni czekoladowy Weyermann | 20 kg (6.7%) | 55 % | 750 |
| Grain | Słód Caramunich Typ II Weyermann | 15 kg (5%) | 73 % | 120 |
| Grain | Jęczmień palony | 10 kg (3.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 750 g | 60 min | 15.5 % |
| Boil | Marynka | 1000 g | 30 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 500 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------|---------|-----------|----------|
| Flavor | Strąki karobu | 45000 g | Secondary | 7 day(s) |