

wisnia

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **30**
- SRM **32.5**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Pilzneński | 3 kg (54.5%) | 81 % | 4 |
| Grain | Monachijski | 1 kg (18.2%) | 80 % | 16 |
| Grain | Strzegom Karmel 300 | 0.5 kg (9.1%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (3.6%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.3 kg (5.5%) | 55 % | 985 |
| Grain | Płatki jeczmienne | 0.5 kg (9.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Eldorado | 20 g | 60 min | 13.7 % |
| Aroma (end of boil) | Mandarina Bavaria | 20 g | 5 min | 9.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 10 g | --- |

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|-----------|----------|
| Flavor | wisnia | 1000 g | Secondary | 7 day(s) |
| Flavor | laktoza | 1000 g | Boil | 5 min |