

ciemny maniek

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **44**
- SRM **73.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

Steps

- Temp **66 C**, Time **75 min**
- Temp **76 C**, Time **10 min**
- Temp **72 C**, Time **5 min**

Mash step by step

- Heat up **10.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **5 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **19.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|---------------------------------|----------------|-------|------|
| Liquid Extract | WES ekstrakt słodowy jasny | 1.5 kg (22.4%) | 80 % | --- |
| Adjunct | laktoza | 0 kg | --- % | --- |
| Grain | Strzegom pszenica prażona | 0.3 kg (4.5%) | 70 % | 1000 |
| Grain | Jęczmień palony | 0.3 kg (4.5%) | 70 % | 985 |
| Grain | słód czekoladowy | 0.3 kg (4.5%) | --- % | 1200 |
| Grain | Casle Malting Whisky Nature | 2 kg (29.9%) | 85 % | 4 |
| Liquid Extract | ekstrakt słodowy ciemny Bruntal | 1.5 kg (22.4%) | 90 % | 621 |
| Grain | Słód pszeniczny Bestmalz | 0.5 kg (7.5%) | 82 % | 5 |
| Adjunct | Strzegom Czekoladowy ciemny | 0.3 kg (4.5%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Chinook | 40 g | 60 min | 13 % |

| | | | | |
|---------------------|---------|------|-------|------|
| Aroma (end of boil) | Chinook | 10 g | 5 min | 13 % |
| Dry Hop | Chinook | 50 g | --- | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|-------|--------|------------|
| FM53 Voss kveik | Ale | Slant | 300 ml | FM |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------------------------------|--------|-----------|----------|
| Spice | laska vanili | 1 g | Secondary | 7 day(s) |
| Flavor | płatki dębowe burbon macerowane | 25 g | Secondary | 7 day(s) |