

Smolista noc

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **32**
- SRM **81.8**
- 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 **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17.9 liter(s)**

Steps

- Temp **31 C**, Time **600 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **75 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **33.2C**
- Add grains
- Keep mash **600 min** at **31C**
- Keep mash **30 min** at **65C**
- Keep mash **75 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński | 1 kg (19.6%) | 80 % | 4 |
| Grain | Castle Malting diastatyczny | 0.4 kg (7.8%) | 80 % | 5 |
| Grain | Strzegom Jęczmień prażony | 0.2 kg (3.9%) | 70 % | 1000 |
| Grain | Strzegom żyto prażone | 0.3 kg (5.9%) | 65 % | 1100 |
| Grain | Strzegom Czekoladowy ciemny | 1 kg (19.6%) | 68 % | 1200 |
| Grain | Strzegom Karmel 150 | 1.2 kg (23.5%) | 75 % | 150 |
| Grain | Strzegom Karmel 600 | 1 kg (19.6%) | 68 % | 600 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Boil | Magnat PL | 15 g | 60 min | 12.5 % |
| Aroma (end of boil) | Magnat PL | 15 g | 15 min | 12.5 % |

| | | | | |
|---------------------|-----------|------|----------|--------|
| Aroma (end of boil) | Magnat PL | 15 g | 0 min | 12.5 % |
| Dry Hop | Magnat PL | 20 g | 3 day(s) | 12.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale | Slant | 100 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|-----------|-----------|
| Flavor | płatki dębu | 30 g | Secondary | 14 day(s) |