

## Smolista noc - RIS

- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **59**
- SRM **210.5**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **5.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **6.4 liter(s)**

### Mash information

- Mash efficiency **35 %**
- 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 **-1.3 liter(s)** of **76C** water or to achieve **6.4 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 | 10 g   | 60 min | 12.5 %     |
| Aroma (end of boil) | Magnat PL | 10 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 | 20 g   | Secondary | 14 day(s) |