

# RIS

- Gravity **24.9 BLG**
- ABV **11.6 %**
- IBU **67**
- SRM **53.8**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **21.7 liter(s)**

## Mash information

- Mash efficiency **71 %**
- Liquor-to-grist ratio **2.3 liter(s) / kg**
- Mash size **20.6 liter(s)**
- Total mash volume **29.5 liter(s)**

## Steps

- Temp **50 C**, Time **10 min**
- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **20.6 liter(s)** of strike water to **56.5C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **90 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **21.7 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Pilzneński                  | 6 kg (67%)     | 81 %  | 4    |
| Grain | Monachijski                 | 1 kg (11.2%)   | 80 %  | 16   |
| Grain | Strzegom<br>Czekoladowy 400 | 0.2 kg (2.2%)  | 68 %  | 400  |
| Grain | Caraaroma                   | 0.2 kg (2.2%)  | 78 %  | 400  |
| Grain | Caramunich® typ I           | 0.6 kg (6.7%)  | 73 %  | 80   |
| Grain | Abbey Malt<br>Weyermann     | 0.2 kg (2.2%)  | 75 %  | 45   |
| Grain | Jęczmień palony             | 0.75 kg (8.4%) | 55 %  | 1100 |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | lunga             | 55 g   | 90 min | 9.5 %      |
| Boil    | Tradition         | 30 g   | 90 min | 5.5 %      |
| Boil    | Tradition         | 10 g   | 10 min | 5.5 %      |
| Boil    | Lublin (Lubelski) | 30 g   | 10 min | 4 %        |