

# ris

- Gravity **27 BLG**
- ABV **12.9 %**
- IBU **48**
- SRM **63.2**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **40.8 liter(s)**
- Total mash volume **54.4 liter(s)**

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC  |
|-------|---------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt      | 10 kg (73.5%)  | 80 %  | 5    |
| Grain | Słód owsiany Fawcett      | 0.5 kg (3.7%)  | 61 %  | 5    |
| Grain | Strzegom pszenica prażona | 0.5 kg (3.7%)  | 70 %  | 1000 |
| Grain | Jęczmień palony           | 0.5 kg (3.7%)  | 55 %  | 985  |
| Grain | Fawcett - Pale Chocolate  | 0.25 kg (1.8%) | 71 %  | 600  |
| Grain | Czekoladowy zytni         | 0.3 kg (2.2%)  | 60 %  | 788  |
| Grain | Carafa III                | 0.3 kg (2.2%)  | 70 %  | 1034 |
| Grain | Strzegom Karmel 600       | 0.25 kg (1.8%) | 68 %  | 601  |
| Grain | Strzegom Karmel 150       | 0.5 kg (3.7%)  | 75 %  | 150  |
| Grain | Płatki jęczmienne         | 0.5 kg (3.7%)  | 60 %  | 3    |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 30 g   | 60 min | 15.9 %     |
| Boil    | Columbus/Tomahawk/Zeus | 30 g   | 60 min | 13.9 %     |

## Notes

- kreda 10g
- soda 5g
- gips 2g
- wapno 3h
- sol epon 1g
- May 1, 2021, 9:32 PM