

Żytni stout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **44**
- SRM **37.4**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg (49.4%) | 80 % | 5 |
| Grain | Żytni | 2 kg (24.7%) | 85 % | 8 |
| Grain | Żytni czekoladowy | 1 kg (12.3%) | 70 % | 700 |
| Grain | Karmelowy żytni Strzegom | 0.5 kg (6.2%) | 75 % | 150 |
| Grain | Płatki żytnie | 0.5 kg (6.2%) | 60 % | 5 |
| Grain | Weyermann - Pszeniczny Czekoladowy | 0.1 kg (1.2%) | 73 % | 1001 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | Centennial | 40 g | 45 min | 10.5 % |
| Aroma (end of boil) | East Kent Goldings | 35 g | 10 min | 6.3 % |
| Aroma (end of boil) | Challenger | 20 g | 10 min | 6.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 40 ml | --- |