

# 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  | ---        |