

## Piwo lager ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **48**
- SRM **4.6**

### 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 **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

### Fermentables

| Type  | Name                                              | Amount       | Yield | EBC |
|-------|---------------------------------------------------|--------------|-------|-----|
| Grain | Słód pilzneński viking malt 3,2-4,5 EBC Weyermann | 5 kg (83.3%) | 80 %  | 4   |
| Grain | słód monachijski                                  | 1 kg (16.7%) | 80 %  | 15  |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| First Wort          | Lublin (Lubelski) | 20 g   | 60 min | 4.3 %      |
| First Wort          | Izabella          | 20 g   | 60 min | 5.2 %      |
| Boil                | Marynka           | 25 g   | 30 min | 7.9 %      |
| Aroma (end of boil) | Sybilla           | 30 g   | 10 min | 7 %        |
| Aroma (end of boil) | Izabella          | 15 g   | 10 min | 5.2 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 15 g   | 10 min | 4.3 %      |
| Whirlpool           | Sybilla           | 20 g   | 5 min  | 7 %        |
| Whirlpool           | Izabella          | 15 g   | 5 min  | 5.2 %      |
| Whirlpool           | Lublin (Lubelski) | 15 g   | 5 min  | 4.3 %      |

### Yeasts

| Name               | Type | Form   | Amount  | Laboratory |
|--------------------|------|--------|---------|------------|
| FM 704 Lutra kveik | Ale  | Liquid | 1000 ml | ---        |