

## PL Dolniak

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **30**
- SRM **3.7**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **52 C**, Time **5 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount       | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.5 kg (90%) | 80 %  | 4   |
| Grain | Pszeniczny          | 0.5 kg (10%) | 85 %  | 4   |

### Hops

| Use for    | Name        | Amount | Time   | Alpha acid |
|------------|-------------|--------|--------|------------|
| Boil       | Iunga       | 25 g   | 60 min | 11 %       |
| Whirlpool  | AMORA PRETA | 30 g   | 0 min  | 9 %        |
| 30min 80°C |             |        |        |            |
| Whirlpool  | Sybilla     | 50 g   | 0 min  | 3.5 %      |
| 30min 80°C |             |        |        |            |

### Yeasts

| Name    | Type  | Form | Amount | Laboratory |
|---------|-------|------|--------|------------|
| W 34/70 | Lager | Dry  | 11.5 g | ---        |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |             |     |      |        |
|--------|-------------|-----|------|--------|
| Fining | whirlfloc t | 3 g | Boil | 10 min |
|--------|-------------|-----|------|--------|