

polskie ale w

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **4**

Batch size

- Expected quantity of finished beer **33.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **35.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **42.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **31.9 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **24.7 liter(s)** of **76C** water or to achieve **42.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|--------------|-------|-----|
| Grain | Pilzneński | 6.6 kg (93%) | 81 % | 4 |
| Grain | Karmelowy Jasny 30EBC | 0.5 kg (7%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 7.1 % |
| Boil | Lublin (Lubelski) | 50 g | 20 min | 2.8 % |
| Boil | Lublin (Lubelski) | 50 g | 10 min | 2.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| 05 | Ale | Dry | 1 g | 2x |