

Lager Kacpra

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **36**
- SRM **6.1**
- Style **Standard American Lager**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **4.2 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **24.7 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **19.9 liter(s)** of strike water to **71.5C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Pilzneński | 4 kg (84.2%) | 81 % | 4 |
| Grain | Strzegom Wiedeński | 0.6 kg (12.6%) | 79 % | 10 |
| Grain | Strzegom Karmel 150 | 0.15 kg (3.2%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------|--------|--------|------------|
| Boil | Marynka | 25 g | 20 min | 10 % |
| Boil | Enigma (AUS) | 40 g | 5 min | 17.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---|-------|------|--------|------------|
| Mangrove Jack's M54 California Lager | Lager | Dry | 33 g | MJ |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------|--------|---------|--------|
| Fining | Whirfloc | 0.5 g | Boil | 5 min |
| Water Agent | NaCl | 7 g | Mash | 60 min |