

Cascade Lager

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **33**
- SRM **2.8**
- Style **Premium American Lager**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **20 %/h**
- Boil size **27.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------|----------------|-------|-----|
| Grain | Monachijski | 1 kg (21.3%) | 80 % | 16 |
| Grain | słód pilzneński | 3.7 kg (78.7%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Cascade | 50 g | 60 min | 5.8 % |
| Whirlpool | Cascade | 50 g | 0 min | 5.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|-------|------|--------|------------|
| Fermentis safale w-34/70 | Lager | Dry | 11 g | --- |