

lager-kowalski

- Gravity **14.7 BLG**
- ABV ---
- IBU **89**
- SRM **4.1**

Batch size

- Expected quantity of finished beer **55 liter(s)**
- Trub loss **5 %**
- Size with trub loss **58.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **70.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **44.7 liter(s)**
- Total mash volume **59.6 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Pilzneński | 12.4 kg (83.2%) | 81 % | 4 |
| Grain | Weyermann - Carapils | 1 kg (6.7%) | 78 % | 4 |
| Grain | Pilzneński | 1.5 kg (10.1%) | 81 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Chinook | 90 g | 50 min | 12.8 % |
| Boil | Oktawia | 30 g | 50 min | 7.8 % |
| Boil | Ella (AUS) | 33 g | 50 min | 14.6 % |
| Aroma (end of boil) | Oktawia | 30 g | 10 min | 7.8 % |
| Aroma (end of boil) | Citra | 30 g | 10 min | 12.4 % |
| Aroma (end of boil) | Yellow Sub | 30 g | 10 min | 6.4 % |
| Aroma (end of boil) | Vic Secret | 30 g | 10 min | 16.3 % |
| Dry Hop | citra | 30 g | 7 day(s) | 12.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 23 g | Fermentis |