

# Sooper Winter Lager

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **15**
- SRM **5.1**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **14.2 liter(s)**

## Steps

- Temp **67 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **10.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **30 min** at **67C**
- Keep mash **30 min** at **72C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount          | Yield  | EBC |
|-------|-----------------------------|-----------------|--------|-----|
| Grain | Pilzneński                  | 2 kg (56.3%)    | 81 %   | 4   |
| Grain | Strzegom Monachijski typ I  | 1 kg (28.2%)    | 79 %   | 16  |
| Grain | Strzegom Monachijski typ II | 0.45 kg (12.7%) | 79 %   | 22  |
| Grain | Acid Malt                   | 0.1 kg (2.8%)   | 58.7 % | 6   |

## Hops

| Use for             | Name                  | Amount | Time    | Alpha acid |
|---------------------|-----------------------|--------|---------|------------|
| Boil                | Hallertauer Tradition | 15 g   | 120 min | 5.5 %      |
| Aroma (end of boil) | Hallertauer Tradition | 20 g   | 5 min   | 5.5 %      |

## Yeasts

| Name          | Type  | Form  | Amount | Laboratory                         |
|---------------|-------|-------|--------|------------------------------------|
| Saflager S-23 | Lager | Slant | 700 ml | Fermentis Division of S.I.Lesaffre |

## Extras

| Type        | Name            | Amount | Use for | Time    |
|-------------|-----------------|--------|---------|---------|
| Water Agent | Gips piwowarski | 2 g    | Boil    | 100 min |

|        |      |     |      |         |
|--------|------|-----|------|---------|
| Fining | Mech | 4 g | Boil | 100 min |
|--------|------|-----|------|---------|

## Notes

- Warka 9.12.2020  
 Gips dodany do wody do zacierania.  
 Po 1h próba jodowa negatywna - zatarte idealnie.  
 Szybka filtracja - trochę zbyt szybka, bo na koniec leciało ~1 blg.  
 W efekcie tylko 7.5 blg brzezki nastawnej.  
 Gotowanie prawie 2h do 9.5 blg.  
 Oszczędne chmielenie brzezki przedniej (w woreczku).  
 Chmiel sypnięty na aromat na schładzanie.  
 Schładzane w wannie z lodem + na dworze od 23 do rana (drożdże zadane o 23).  
 Gęstwa z poprzedniego mocno chmielonego lagera.  
 Temperatura średnia w piwnicy ~8st.  
*Dec 14, 2020, 1:17 PM*