

GERMAN HELLES EXPORT

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **21**
- SRM **4.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **4000 liter(s)**
- Trub loss **5 %**
- Size with trub loss **4200 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **5060 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **3000 liter(s)**
- Total mash volume **4000 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński | 700 kg (70%) | 80 % | 4 |
| Grain | Strzegom Wiedeński | 200 kg (20%) | 79 % | 10 |
| Grain | Pszeniczny | 50 kg (5%) | 85 % | 4 |
| Grain | COOKIE | 50 kg (5%) | 80 % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Magnum | 2100 g | 60 min | 13.5 % |
| Boil | Saaz (Czech Republic) | 1000 g | 30 min | 4.5 % |
| Boil | Hallertau Mittelfruh | 1000 g | 30 min | 3 % |
| Boil | Saaz (Czech Republic) | 1000 g | 15 min | 4.5 % |
| Boil | Hallertau Mittelfruh | 1000 g | 15 min | 3 % |