

Sam chmiel, sam stód, Samson

- Gravity **14 BLG**
- ABV ---
- IBU **44**
- SRM **44**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **78 C**, Time **5 min**
- Temp **68 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **1 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|--------------|-------|------|
| Grain | Strzegom Pale Ale | 4.5 kg (90%) | 79 % | 6 |
| Grain | Jęczmień palony | 0.25 kg (5%) | 55 % | 985 |
| Grain | Strzegom Czekoladowy 1200 | 0.25 kg (5%) | 68 % | 1202 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Goldings | 30 g | 45 min | 6.2 % |
| Boil | Goldings | 30 g | 30 min | 6.2 % |
| Boil | Goldings | 30 g | 10 min | 6.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 30 ml | Fermentum Mobile |