

## SPA - Słoweński Pale Ale

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **55**
- SRM **4.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **50 C**, Time **15 min**
- Temp **62 C**, Time **20 min**
- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **20 min** at **62C**
- Keep mash **50 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pale Malt (2 Row) UK | 5 kg (83.3%)  | 78 %  | 6   |
| Grain | Pszeniczny           | 0.5 kg (8.3%) | 85 %  | 4   |
| Grain | Strzegom Wiedeński   | 0.5 kg (8.3%) | 79 %  | 10  |

### Hops

| Use for             | Name          | Amount | Time     | Alpha acid |
|---------------------|---------------|--------|----------|------------|
| Boil                | Magnum        | 40 g   | 60 min   | 13.5 %     |
| Boil                | Kolibri       | 15 g   | 15 min   | 4 %        |
| Aroma (end of boil) | Styrian Bobek | 20 g   | 0 min    | 4 %        |
| Dry Hop             | Kolibri       | 10 g   | 7 day(s) | 4 %        |
| Dry Hop             | Styrian Bobek | 10 g   | 7 day(s) | 4 %        |
| Dry Hop             | Styrian Bobek | 15 g   | 3 day(s) | 4 %        |