

ŚWIĄTECZNE ALE 17 Blg # 31

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **34**
- SRM **20.7**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **21.5 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **17.2 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|---------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (64.5%) | 80 % | 5 |
| Grain | Karmelowy Jasny 30EBC | 0.1 kg (2.2%) | 75 % | 30 |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (2.2%) | 68 % | 1200 |
| Grain | Carafa II | 0.1 kg (2.2%) | 70 % | 812 |
| Grain | Strzegom Monachijski typ I | 1 kg (21.5%) | 79 % | 16 |
| Liquid Extract | Miód Gryczany (Buckwheat Honey) | 0.35 kg (7.5%) | 70 % | 40 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 15 g | 60 min | 15.5 % |
| Boil | Willamette | 15 g | 10 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | --- |

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|-------|----------------------------|--------|---------|--------|
| Spice | skórka słodkiej pomarańczy | 20 g | Boil | 10 min |
| Spice | skórka gorzkiej pomarańczy | 10 g | Boil | 10 min |
| Spice | skórki suszonej cytryny | 10 g | Boil | 10 min |
| Spice | zest z pomarańczy | 30 g | Boil | 10 min |
| Spice | goździki | 5 g | Boil | 10 min |
| Spice | kardamon | 5 g | Boil | 10 min |
| Spice | anyż | 2 g | Boil | 10 min |
| Spice | kolendra | 10 g | Boil | 10 min |
| Spice | imbir mielony | 2 g | Boil | 10 min |
| Spice | gałka muskatołowa | 2 g | Boil | 10 min |