

HCB007 Azmodan 3.0

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **21**
- SRM **41.7**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**
- Temp **76 C**, Time **30 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **76C**
- Keep mash **5 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 3.2 kg (68.1%) | 79 % | 6 |
| Grain | Carafa II | 0.25 kg (5.3%) | 70 % | 812 |
| Grain | Jęczmień palony | 0.5 kg (10.6%) | 55 % | 985 |
| Grain | Chocolate Malt (UK) | 0.25 kg (5.3%) | 73 % | 887 |
| Grain | Barley, Flaked | 0.5 kg (10.6%) | 70 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Challenger | 15 g | 60 min | 5.8 % |
| Boil | Challenger | 10 g | 10 min | 5.8 % |
| Boil | Lemon drop | 10 g | 60 min | 4.6 % |
| Boil | Lemon drop | 15 g | 10 min | 4.6 % |
| Dry Hop | Lemon drop | 25 g | 4 day(s) | 4.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 1000 ml | Fermentum Mobile |