

xmsa ale

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **36**
- SRM **34.9**
- Style **Christmas/Winter Specialty Spiced Beer**

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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|---------------|--------|------|
| Grain | Viking Pale Ale malt | 6 kg (74.1%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (12.3%) | 85 % | 4 |
| Grain | Special B Malt | 0.4 kg (4.9%) | 65.2 % | 315 |
| Grain | Strzegom Karmel 300 | 0.2 kg (2.5%) | 70 % | 299 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.2 kg (2.5%) | 73 % | 1001 |
| Grain | Black (Patent) Malt | 0.3 kg (3.7%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 30 g | 60 min | 13.5 % |