

Świąteczne 2017

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **52**
- SRM **92.8**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **1 %/h**
- Boil size **24.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|---------------------------------|----------------|-------|-----|
| Liquid Extract | ekstrakt słodowy ciemny Bruntal | 5.1 kg (91.1%) | 82 % | 621 |
| Sugar | Cukier | 0.5 kg (8.9%) | 100 % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Marynka | 50 g | 60 min | 8.7 % |
| Aroma (end of boil) | Ekuanot | 30 g | 5 min | 16.1 % |
| Aroma (end of boil) | Vic Secret | 30 g | 5 min | 16.2 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|-------|--------------------|--------|---------|--------|
| Spice | Curacao | 20 g | Boil | 20 min |
| Spice | Skórka kalamondyny | 5 g | Boil | 20 min |