

Polaris single hop

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **39**
- SRM **4.7**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **47.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.6 liter(s)**
- Total mash volume **40.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-------------|-------|-----|
| Grain | Viking Pale Ale malt | 10 kg (98%) | 80 % | 5 |
| Grain | Karmelowy Czerwony | 0.2 kg (2%) | 75 % | 59 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Polaris | 20 g | 60 min | 19.8 % |
| Aroma (end of boil) | Polaris | 30 g | 10 min | 19.8 % |
| Whirlpool | Polaris | 50 g | 5 min | 19.8 % |