

# Saphir

The aroma hop Saphir is a premium aroma variety and was developed at the Hop Research Center in Hüll. Since its approval in 2002, this aroma hop has proven quite suitable for brewing almost any type of beer. The intense aroma of this hop is enticing with its classic floral and fruity elements. This variety is also well suited for late hop additions or for dry hopping due to its high linalool content. Due to its characteristic low cohumulone level and concentration of bitter substances, beer brewed with Saphir exhibits a medium hop intensity and a harmonious bitterness.



Mother

83/017/020

Father

80/056/006

## Saphir

## Analytical Values

### Bitter Substances

$\alpha$ -acid [EBC 7.4]	3.6 % w/w
$\beta$ -acid [EBC 7.7]	6.8 % w/w
$\beta/\alpha$ [EBC 7.7]	1.9
Co-Humulone [EBC 7.7]	15 % rel.

### Aroma Substances

Total Oil [EBC 7.10]	1.10 ml/100 g
Myrcene [GC-FID]	299 mg/100 g
$\beta$ -Caryophyllene [GC-FID]	57 mg/100 g
Farnesen [GC-FID]	2 mg/100 g
$\alpha$ -Humulene [GC-FID]	136 mg/100 g
$\Sigma$ Hydrocarbon fraction [GC-FID]	593 mg/100 g
Linalool [GC-FID]	9 mg/100 g
Geraniol [GC-FID]	1 mg/100 g
Geranyl acetate [GC-FID]	0 mg/100 g
2-methylbutyl 2-methylpropanoate [GC-FID]	4 mg/100 g
$\Sigma$ Oxygen fraction [GC-FID]	110 mg/100 g
$\Sigma$ Monoterpene alcohols and esters [GC-FID]	13 mg/100 g
$\Sigma$ Propanoate [GC-FID]	5 mg/100 g
$\Sigma$ unsaturated esters [GC-FID]	3 mg/100 g
$\Sigma$ Esters [GC-FID]	18 mg/100 g
$\Sigma$ Sesquiterpene alcohols [GC-FID]	33 mg/100 g
$\Sigma$ Ketone [GC-FID]	45 mg/100 g
$\Sigma$ Hydrocarbon fraction + Oxygen fraction [GC-FID]	703 mg/100 g

### Polyphenols

Polyphenols [EBC 7.14]	4.5 % w/w
$\Sigma$ Low-molecular polyphenols [EBC 7.7]	11715 mg/l
Xanthohumol [EBC 7.7]	0.37 % w/w

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## Usage in Brewing

### Often Used

	rarely	medium	frequently
Boil – Beginning	<div></div>		
Boil – Midpoint	<div></div>		
Boil – End & Whirlpool			<div></div>
Dry Hopping			<div></div>

### Recommended Beer Styles

	rarely	medium	frequently
Lager			<div></div>
Ale			<div></div>
Heavily dry-hopped beers			<div></div>
Dark Beer		<div></div>	
Wheat Beer		<div></div>	
Belgian Origin Styles		<div></div>	

### Agronomic Aspects

	low		medium	high	
Climate Tolerance			<div></div>		
	low	medium	good	very good	
Plant Health	<div></div>				
	early	medium early	medium	medium late	late
Maturity			<div></div>		
	low		medium	high	
Storage Stability			<div></div>		