



Letter to: Dalmaconsult d.o.o.
GfL-Nr: 3374-1

Page 2 of 4
19.09.2013

S e n s o r i c a l R e p o r t

Colour (IFU No.25) : deeply red complete cherries (with stone), diameter approx. 1 cm

Aroma (IFU No.25) : fruity-typical

Flavour (IFU No.25) : fruity-marked

C h e m i c a l - p h y s i c a l R e p o r t

Brix (IFU Nr.8) : 28.5

Brix, corrected (GfL-2052) : 29.5

Titration acid (pH 7 tart.a.) (IFU Nr.3) : 22.12 g/kg

Titration acid (pH 7,0 a. malic acid) : 19.76 g/kg

Titration acid (pH 8,1 cit.a.) (IFU Nr.3) : 19.76 g/kg

L-malic acid (IFU No.21) : 21.22 g/kg

Citric acid (IFU No.22) : 0.03 g/kg

Iso-citric acid (IFU No.54) : 13 mg/kg

Sucrose (IFU No.56) : 14.0 g/kg

Glucose (IFU Nr.55) : 83.3 g/kg

Fructose (IFU Nr.55) : 69.3 g/kg

Sorbitol (IFU No.62) : 51.99 g/kg

Potassium (IFU No.33) : 2.93 g/kg

Sodium (IFU No.33) : 12 mg/kg

Calcium (IFU Nr.33) : 387 mg/kg

Magnesium (IFU Nr.33) : 160 mg/kg

Phosphate (IFU No.35) : 419 mg/kg

Total Phosphorus (P) (IFU No.35) : 137 mg/kg

Nitrate (IFU No.48) : 6 mg/kg

Chloride (IFU No. 37) : 35 mg/kg

Sulfate (IFU No. 36) : 34 mg/kg

Formol Number (IFU No. 30) : 9.5 ml.1nOH/100g

Proline (IFU No.49) : 552 mg/kg

Fingerprint Anthocyan (IFU Nr.71) : impeccable

pH-Value (IFU No.11) : 3.3



Letter to: Dalmaconsult d.o.o.
GfL-Nr: 3374-1Page 3 of 4
19.09.2013**Aminoacids (IFU Nr. 57)**

Aspartic acid	:	0.02 mmol/kg	
Threonine	:	0.04 mmol/kg	
Serine	:	0.07 mmol/kg	
Asparagine	:	0.24 mmol/kg	
Glutamic acid	:	0.05 mmol/kg	
Glutamine	:	0.32 mmol/kg	
Proline	:	0.91 mmol/kg	
Glycine	:	not detectable (DL:	0.01 mmol/kg)
Alanine	:	0.03 mmol/kg	
Valine	:	0.05 mmol/kg	
Methionine	:	not detectable (DL:	0.01 mmol/kg)
Isoleucine	:	not detectable (DL:	0.01 mmol/kg)
Leucine	:	not detectable (DL:	0.01 mmol/kg)
Tyrosine	:	not detectable (DL:	0.01 mmol/kg)
Phenylalanine	:	not detectable (DL:	0.01 mmol/kg)
g-Aminobutric acid	:	0.24 mmol/kg	
Ethanolamine	:	0.07 mmol/kg	
NH ₃	:	0.78 mmol/kg	
Ornithine	:	not detectable (DL:	0.01 mmol/kg)
Lysine	:	not detectable (DL:	0.01 mmol/kg)
Histidine	:	0.02 mmol/kg	
Arginine	:	not detectable (DL:	0.01 mmol/kg)
Sum Aminoacids	:	2.00 mmol/kg	

I n n e r r e l a t i o n s

Total Sugar (calculated)	:	166.6	g/kg	
Sugarfree extract	:	128.5	g/kg	
%-Sucrose from total sugar	:			8.4
Glucose/Fructose	:			1.20
Citric acid/Isocitric acid	:			2
Ash (GfL-2033)	:	6.76	g/kg	
%-Phosphate in the ash	:			6.2
%-Potassium in the ash	:			43.3
Potassium/Magnesium	:			18.31
Potassium/Calcium	:			7.57
Formol number/Proline	:			17.2



Letter to: Dalmaconsult d.o.o.
GfL-Nr: 3374-1

Page 4 of 4
19.09.2013

The following results refer to 1 g titratable acid
(calculated as tartaric acid pH 7,0)

Sugarfree extract (g)	:	5.81
Apfelsäure (g)	:	0.959
Citric acid (g)	:	0.001
Iso-Citric acid (mg)	:	0.59
Sorbitol (g)	:	2.4
Ash (g)	:	0.306
Potassium (g)	:	0.132
Calcium (mg)	:	17.50
Magnesium (mg)	:	7.233
Phosphate (mg)	:	18.94
Formol number (ml 0,1n NaOH)	:	0.43
Proline (mg)	:	24.96

C O M M E N T :

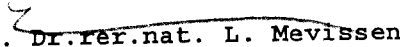
From the sour cherries received in impeccable condition a puree was produced for analysis.

The sample shows a remarkably high Brix level which is approximately twice as high as usually observed. Furthermore the sample is very rich in acid, sorbitol and minerals. Amino acids, respectively the formol number, are very low.

Summing up it must be concluded that the sour cherries received are of exceptional quality.

G f L

Gesellschaft für
Lebensmittel-Forschung mbH

i.A.  Dr.rer.nat. L. Mevissen

Used not officially validated methods and remarks:

GfL-2052 Millies K. et al., Flüssiges Obst 51 (1984) S.629) / IFU Nr.8

GfL-2033 Fischer-Ayloff-Cook P., H.-J. Hofsommer Flüssiges Obst 61 (1994), 95

