

Questions concerning our products?

Then contact us:

Tel.: +49 (0) 9826 / 62344 or email: info@qse-gmbh.de

Product Description

Certified long term stable standards made of raw milk

Product appellation:

- | | |
|--------------------------|----------------------------|
| ➤ F1 (product no.: 6011) | ➤ E1 (product no.: 6107) |
| ➤ F2 (product no.: 6012) | ➤ E2 (product no.: 6108) |
| ➤ F3 (product no.: 6013) | ➤ E3 (product no.: 6109) |
| ➤ F4 (product no.: 6014) | ➤ E4 (product no.: 6110) |
| ➤ F5 (product no.: 6030) | ➤ E&F1 (product no.: 6201) |
| ➤ F6 (product no.: 6031) | ➤ E&F2 (product no.: 6202) |
| ➤ F7 (product no.: 6032) | ➤ E&F3 (product no.: 6203) |
| ➤ F8 (product no.: 6033) | ➤ E&F4 (product no.: 6204) |



Product description:

- shock frozen raw milk (cow)
- no heat treatment
- no homogenization
- no preservatives
- shelf life at least 3 years from date of manufacture
- storage at ≤ -20 °C

Parameters:

Parameter (product)	Range	Method
Fat (F1-F8 + E&F1-4)	ca. 2,2 - 6,0 g/100 g	Röse-Gottlieb
Protein (E1-E4, F3 + E&F1-4)	ca. 3,0 – 4,3 g/100 g	Kjeldahl
Lactose (E1, E4, F3 + E&F1-4)	ca. 4,2 – 5,4 g/100 g	Enzymology, HPLC
Dry Matter (E1, E4, F3 + E&F1-4)	ca. 11,5 – 15,0 g/100 g	102 °C
Urea (F1-F4)	ca. 100 - 550 mg/L	Continuous Flow Analysis, Spectrophotometry
Freezing Point (E1-E4, F3 + E&F1-4)	ca. -0,600 - -0,450 °C	Cryoscopy
pH-value (F3)	ca. 6,68	Electrometry
Casein (E1-E4, F3 + E&F1-4)	ca. 2,3 – 3,4 g/100 g	Kjeldahl
NPN (F3)	ca. 0,2 g/100 g	Kjeldahl
Unsaturated Fatty Acids (F3)	ca. 1,3 g/100 g	GC
Saturated Fatty Acids (F3)	ca. 2,9 g/100 g	GC
Mono Unsaturated Fatty Acids (F3)	ca. 1,1 g/100 g	GC
Poly Unsaturated Fatty Acids (F3)	ca. 0,2 g/100 g	GC
C14:0 (F3)	ca. 0,5 g/100 g	GC
C16:0 (F3)	ca. 1,3 g/100 g	GC
C18:0 (F3)	ca. 0,5 g/100 g	GC
C18:1 (F3)	ca. 1,0 g/100 g	GC

For more detailed information please have a look at our product and price list!

Application:

- slope and intercept calibration/adjustment of analytical instruments (e. g. infrared instruments)
- comparison and statistical control in reference analysis (e. g. bench chemistry methods)

Advantages:

- **accredited reference material**
- **long-term stability:** stable reference values over a long period of time
- **secured reference values:** characterization in up to **9 different according to ISO/IEC 17025 accredited laboratories:**
 - more security in monitoring your measuring equipment
 - accurate calibration saves resources and money
- **no preservatives:**
 - no risks for people and environment
 - no safety precautions and rules of conduct are necessary (e. g. for waste disposal)
- **simple and quick application:** Store – Defrost – Measure

Packaging / Consignment:

- packaging unit: PP-plastic-bottles, at least 40 mL per bottle
- availability: normally within a few days, as single bottle or as set
 - Set F1-F4 (product no. 6015)
 - Set F1-F8 (product no. 6028)
 - Set E1-E4 (product no. 6111 or 6113)
 - Set E1, E4, F3 (product no. 6112)
 - Set F1-F4, PM8 for calibration up to ca. 7 % fat (product no. 6027)
 - *Set E&F1-4 (product no. 6205)*
- packaging: styrofoam or cool box with thermal packs
- delivery ex works