

# Thermo Extractor TE 2

## for preparing samples for thermal desorption









# Four good reasons why you should choose the GERSTEL TE 2:

- Greater sample capacity compared to TDS tubes
- Accomodates wet samples
- Simplified extraction
- Saves analysis time

- Lower detection limits
- Even liquid samples can be processed
- Capable of simultaneous matrix and water removal
- Off-line operation doesn't interfere with TDS analysis



### **GERSTEL Thermo Extractor TE 2**



High water content, physical sample size, and low concentration of analytes can hinder thermal desorption/ GC analysis of volatile com-

of interest such as fragrances, pounds off-odors and reaction products. The GER-STEL ThermoExtractor (TE 2) eliminates this problem by concentrating the analytes on a standard TDS adsorbent tube while eliminating water and leaving the matrix behind.

In the sample preparation stage, a solid, gelatinous or liquid sample is placed in the TE tube which is then heated to the desired temperature (typically 30°C to 100°C) while an adjustable flow of inert gas is passed through the TE tube.

The inert gas flowing around the hot sample extracts the water and the volatile components, which are then trapped on the Tenax bed of a standard TDS tube. The water is eliminated by "dry purging" the Tenax tube. The tube is then removed and placed in a TDS 2.

The Tenax tube is analyzed using the GERSTEL thermal desorption technique of refocusing compounds in the Cooled Injection System CIS, and then introducing them as a narrow band onto the GC column for separation.

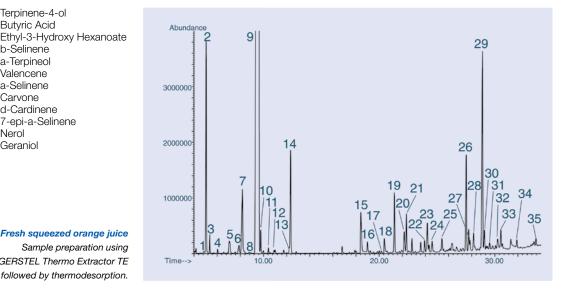
### **Technical specifications**

100 mm Width 250 mm Depth 100 mm Height 1,2 kg Weight Power consumption 160 W

- a-Pinene
- Ethyl Butyrate
- Ethyl-2-Methyl Butyrate 3
- Hexanal
- 5 Sabinene
- d-3-Carene Myrcene
- 8 a-Terpinene
- 9 Limonene
- 10 b-Phellandrene
- Ethyl Caproate 11
- g-Terpinene 12 a-Terpinolene 13
- 14 Acetoine
- Acetic Acid
- **Furfural** 16
- 17 a-Conaene 18 Formic Acid
- 19 Ethyl-3-Hydroxy Butyrate
- 2,3-Butanediol 20
- Linalool 21
- Hexadecane 22
- 1,2-Propanediol

- Terpinene-4-ol
- 25 Butyric Acid
- 26 Ethyl-3-Hydroxy Hexanoate
- 27 b-Selinene
- 28 a-Terpineol
- Valencene
- 30 a-Selinene
- 31 Carvone
- 32 d-Cardinene 33 7-epi-a-Selinene
- Nerol
- Geraniol

#### Fresh squeezed orange juice Sample preparation using GERSTEL Thermo Extractor TE





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