

Бр. 1962

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ГОД.

БЕОГРАД

**Tenderske dokumentacije za nabavku Dobara**

**Indetifikacioni broj: MOP br: IOP/09-2015/NCE/2**

**Predmet: Nabavka nove kapitalne opreme**

**Mesto: Republika Srbija**

**Sledeće izmene su načinjene u Tenderskoj dokumentaciji za nabavku Dobara:**

**- Originalni tekst Odeljak II. List sa podacima o ponudi (LPP), UP 14.8 (b) (i) i (c) (v):**

Adresa dostave:

Dobra treba isporučiti na krajnje odredište u skladu sa Odeljkom VII, Pregled zahteva, Tehničkim specifikacijama i odgovarajućim dokumentima.

Cena ponude treba da je navedena u skladu sa paritetom: **DAP+UNLOADED.**

Ponudjaču je dozvoljeno da prihvati ponudu robe koja je već uvezena samo u slučaju da mu se dostavi dokaz od strane Ponudjača, o mogućnosti izvođenja revizije procedure carinjenja.

Naručilac ne plaća bilo kakav iznos Carinskih dažbina i drugih uvoznih taksi.

**je izmenjen sledećim:**

Adresa dostave:

Dobra treba isporučiti na krajnje odredište u skladu sa Odeljkom VII, Pregled zahteva, Tehničkim specifikacijama i odgovarajućim dokumentima.

Cena ponude treba da je navedena u skladu sa paritetom: **DAP+UNLOADED.**

**- Originalni tekst Odeljka VII. Pregled zahteva, Tehnička specifikacija ANNEX I za Lot No.: 9 stavku 9.1 - High Resolution GC/MS**

**je izmenjen sledećim:**

**High Resolution GC/MS**

**Magnet Sector GCHRMS System**

EI and CI performed on dedicated inner sources optimised for each technique.

Probe introduction without removing the GC interface.

It must be possible to remove the outer and inner source lenses without breaking vacuum in the analyser.

Replacing a GC column without breaking vacuum in order to maximise uptime is preferable.

**Magnet Sector Analyser**

Any geometry is acceptable

Control analyser collector slit width setting typically in less than 0.3 seconds or equivalent.

First field free region collision cell or equivalent.

**DETECTOR**

Off axis dual conversion dynode multiplier ion detector or equivalent.

High dynamic range of greater than 5 orders of magnitude.

**VACUUM SYSTEM**

Turbo pumps to provide the fine pumping, with either rotary vane or scroll roughing pumps.

#### PERFORMANCE SPECIFICATIONS

**DYNAMIC RANGE** Greater than 5 orders of linear dynamic range or better.

**Mass range** Up to 2000 Da.

Possibility to explore higher mass range up to 6000 Da is preferable.

**RESOLVING POWER** equal to or greater than 60,000.

**MASS MEASUREMENT ACCURACY** < 1.5mDa

**SCAN CYCLE RATE** equal to or greater than 3 scan per second

**GCMS SENSITIVITY DIOXIN INSTRUMENTS** In SIR mode is:  $\geq 125:1$ , or better.

#### GC and Ancillary Devices

##### Column Oven

Temperature range: Ambient temperature +4 °C to 450 °C.

Temperature set point resolution: 1 °C.

Maximum ramp rate: 120 °C/min

Oven cool down (22 °C ambient) 450 to 50 °C in 4.0 min

##### Pneumatics Control

range 0.000 to 99.999 psi increments of 0.001 psi; 0.01 psi for the range 100.00 psi to 150.00 psi

##### Injector S/SL

Suitable for all capillary columns (50  $\mu\text{m}$  to 530  $\mu\text{m}$  id).

Split ratios up to 7,500:1

Maximum temperature: 400 °C.

##### GC Autosampler

Syringe sizes 0.5 $\mu\text{l}$ , 1 $\mu\text{l}$ , 5 $\mu\text{l}$ , 10 $\mu\text{l}$ , 25 $\mu\text{l}$ , 50 $\mu\text{l}$ , 100 $\mu\text{l}$

Sample capacity: up to 100 vials of 2ml

Syringe cleaning: Wash Station for 2 different solvents (standard)

#### SOFTWARE

The PC must be configured with a MS control software on the Windows based platform

Data Acquisition, Peak Integration, Calibration, Quantification and QC calculations must be fully automated.

Software must calculate concentration using up to 4 Toxic Equivalence factors.

Software must flag samples in the browser report when:

- (a) Confirmatory ion ratios out of tolerance
- (b) Compound above a maximum concentration limit
- (c) Compound above a reporting limit concentration
- (d) Signal to noise ratio below threshold
- (e) Retention time or relative retention time out of tolerance
- (f) Coefficient of determination ( $R^2$ ) below threshold
- (g) Calibration % RSD above threshold
- (h) Recovery % out of tolerance
- (i) Concentration below LOD or LOQ
- (j) Blank response above threshold

Software should be supplied with the example methods for EN 1948, USEPA 1613 and USEPA 1668a

Additional requirements:

- Supply with all kind of electrical installations and/or connections (including additional power station if necessary) for undisturbed operation of the instrument,
- Supply with UPS protection system,
- Supply with all necessary gas tanks, gas lines, gasses, gauges, gas filters, tubes, etc,
- Supply with four GC capillary columns for determination of POPs (dioxins, dibenzofurans, dioxin-like PCBs, PAHs, etc.) in food and three sample preparation columns – according to Table 5
- Supply with analytical standards (included deuterated standards) for

1. dioxins, dibenzofurans, dioxin-like PCBs (Commission Regulation EU 252/2012) – according to Table 1a and 1b
2. 16 EU priority PAHs (Commission Regulation EU 208/2005 ad 4 and Benzo[c]fluorene) – according to Table 2.
3. PBDEs and other standards- according to Table 3
4. Other standards- according to Table 4

Supply with necessary sample preparation cartridges for 4000 analysis .

- GC/MS maintenance kit for 2 years

- Training of two analysts in accredited laboratory for determination of dioxins in food,

Varranty Period: 12 months or more

Delivery period : 90 days

Delivery Place: Institut za higijenu i tehnologiju mesa u Beogradu,

Molimo vas da u prilogu pogledate modifikovan **Lot 9 ANNEX-a I**, Tehničke specifikacije

*NAPOMENA: Molim vas da u prilogu modifikovanog Lot-a Annex-a I pogledate dodatne tabele*



**Svi ostali uslovi Tenderske dokumentacije ostaju nepromenjeni.**

**Gorenavedene izmene su sastavni deo Tenderske dokumentacije.**