

№050/ 234

"CONFIRM"

Chairman of technical expert  
commission



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"2" 2019

**TECHNICAL ASSIGNMENT  
for delivery of caustic soda (NaOH)**

**I. NAME OF GOODS**

Caustic soda (NaOH)

**II. DESCRIPTION OF GOODS (FUNCTIONAL, QUALITATIVE CHARACTERISTICS AND CONSUMER PROPERTIES)**

White flakes. It is applied at compression unit, alkali treatment of pyrolysis gas, oxidation and neutralization of spent alkali of the ethylene production unit and at the demineralized water preparation unit, steam condensate systems of utilities unit.

**III. PURPOSE OF PURCHASE OF GOODS**

The purpose of purchase of caustic soda is:

- alkali treatment of pyrolysis gas from acid gases and sulfur compounds with alkaline solution at compression and alkali treatment of pyrolysis gas unit.
- It is used to recovery H<sub>2</sub>S and CO<sub>2</sub> from content of pyrolysis gas.
- Regeneration of mixed beds at demineralized water preparation unit.
- Maintain the production of quality products in accordance with the requirements of process procedure of the unit.

**IV. BASIS FOR PURCHASE OF GOODS (OR FOR PROJECT IMPLEMENTATION WITHIN THE FRAMEWORK OF PURCHASE)**

Applications for the purchase of caustic soda (NaOH) drawn up on the basis of the annual regulatory needs of Shurtan GCC in the set of imported chemicals for 2020.

**V. THE NECESSARY SPECIFICATION OF THE GOODS**

Name	Caustic soda
Molecular formula	NaOH
Appearance	White flakes
Molecular weight g/mol	40.0
Mass fraction (NaOH)%	not more than 98.5
Mass fraction (Na <sub>2</sub> CO <sub>3</sub> )%	not more than 0.8
Mass fraction (NaCl)%	not more than 0.05
Mass fraction of iron in equivalent of Fe <sub>2</sub> O <sub>3</sub> %	not more than 0.004

Amount of mass fractions of iron oxides, aluminum,	not more than 0.02
Mass fraction of silicic acid in equivalent of SiO <sub>2</sub> %	not more than 0.02
Mass fraction of sodium sulfate,	not more than 0.03
The amount of mass fractions of calcium and magnesium in equivalent of Ca%	not more than 0.01
Mass fraction of sodium chloride,%,	not more than 0.01
Mass fraction of mercury%	not more than 0.0005
Mass fraction of copper%	not more than 0.002
Boiling point	1390°C
Melting point	318°C
Relative density/(H <sub>2</sub> O = 1)	2.1
Water solubility/100ml	117 g

#### VI. REQUIREMENTS FOR THE CONFORMITY OF GOODS TO REGULATORY TECHNICAL REGULATION DOCUMENTS

Purchased goods should comply with well-known identification number CAS#1310-73-2 or GOST2263-79;

#### VII. REQUIREMENTS FOR STORAGE, PACKING, SHIPPING AND TRANSPORTATION OF GOODS

The goods should be shipped in the manufacturer standard export package (sealed, tight, and duly packaged) ensuring its full safety from any kind of damage during long-term storage and transportation of products, taking into account several overloads in transit.

In 25 kg bags according to the manufacturer's technical documentation.

Other options and package sizes are subject to additional approval by Customer to their acceptability.

Marking should be applied properly in accordance with the manufacturer standard technical document or in accordance with the requirements of international standards.

#### VIII. REQUIREMENTS FOR INSURANCE OF GOODS.

Not required

#### IX. REQUIREMENTS FOR DELIVERY AND ACCEPTANCE ORDER OF THE GOODS, CUSTOMER'S ADDITIONAL REQUIREMENTS

Each participating company in the contestant should take into account the inclusion of the technical offer the following information:

- need to provide certificates (international certificates ISO-9001, 14001, OHSAS 18001, the manufacturer quality certificate and-or other certificates of the internationally recognized laboratories and the test centers);
- it is necessary to submit a reference list of the company;
- specify the public information of the manufacturer (the company's website);

#### X. REQUIREMENTS FOR THE CONDITION OF GOODS (REQUIREMENTS FOR QUALITY, SAFETY AND ENVIRONMENTAL REQUIREMENTS)

The goods must be new. The quality of goods must ensure the possibility of use without negative consequences:

- The goods must be safe during operation, storage and disposal;
- The goods should not cause any environmental damage.
- In the acceptance test, actual data on the technical characteristics of the goods should correspond to the parameters indicated in the quality certificate, otherwise the goods will be returned back to the supplier.

Experimental industrial test is not required, because the customer is not able to conduct an experimental industrial test.

#### XI. REQUIREMENTS FOR QUANTITY, PERIODICITY, TERM OF DELIVERY OF GOODS

The total quantity of goods required is 606.33 tons.

The goods will be shipped in batches.

The delivery schedule and the quantity of each batch are determined at the time of signing the contract.

The delivery date can be changed in accordance with the actual production rates and, therefore, the delivery date must be agreed with the Customer and delivered on a precisely specified date.

The maximum delivery time is 45 days after the order is placed by Customer or from the date of payment for the goods in the appropriate account.

Term of payment - 100% letter of credit.

#### XII. SOURCE OF FINANCING

Own funds of Shurtan GCC, LLC

#### XIII. REQUIREMENTS TO THE DELIVERY POINT

Railway wagon shipping: DAP - railroad station Kengsoy (station code - 732602), "Uzbekistan Temir Yullari"

Truck Delivery: DAP - Uzbekistan, Kashkadarya, Guzar district, Shurtan, 180300.

Container Shipping: DAP - railroad station Karshi (station code - 733104), "Uzbekistan Temir Yullari".

#### XIV. REQUIREMENTS TO TRANSFER THE CUSTOMER TECHNICAL AND OTHER DOCUMENTS IN THE DELIVERY OF GOODS (ACCOMPANYING DOCUMENTS)

The goods should be accompanied by the following documentation,

- Seller's invoice with description of goods, indicating the quantity, unit price of goods and total amount;
- a bill of lading issued in Consignee with a stamp of dispatch-station and the destination, the Customer, the number and date of signing of the existing contract;
- certificate of origin of goods with the number and date of the invoice;
- packing list;
- certificate of quality of goods issued by the manufacturer;
- safety data sheet according to GOST-30333

**XV. REQUIREMENTS FOR THE PRODUCTION YEAR/ ISSUE OF GOODS**

The goods must be produced no more than 2 months prior to the date of shipment, in full compliance with the description, specifications and the manufacturer specifications and/or conditions of this technical assignment and provide the required quality.

**XVI. REQUIREMENTS TO THE REMAINING LIFETIME, STORAGE TIME, PROVIDING A WARRANTY OF QUALITY OF GOODS**

The remaining shelf life, storage time and quality assurance period - at least 1 year.

**XVII. FORM REQUIREMENT OF PROVIDED INFORMATION**

Submitted technical proposal should:

- have a copy in electronic media (CD/DVD discs or USB data carrier);
- Regardless of the original language, submitted documents should be duplicated in Uzbek, Russian and/or English.

**Members of technical expert commission**

**Chief process engineer:**



**H. Toshboev**

**Chief of Ethylene production unit:**



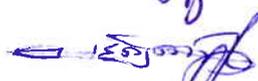
**M. Mukhametshin**

**Chief of Utility unit:**



**N. Turdikulov**

**Chief of Commodity raw materials unit:**



**I. Kodirov**

**Process engineer Ethylene production unit:**



**F. Makhamov**

**Process engineer Utility unit:**



**M. Eshkurbanov**

**Chief of production coordination department:**



**G. Rashidov**

**Chief of warehousing and supply department:**



**Yu. Anorov**