

# Deutsche Akkreditierungsstelle GmbH

## Annex to the Accreditation Certificate D-PL-14373-01-00 according to DIN EN ISO/IEC 17025:2005

Period of validity: 26.04.2019 to 28.02.2021

Date of issue: 26.04.2019

Holder of certificate:

**Qatar Fertilizer Company  
PO Box 50001, Mesaieed, Qatar**

Tests in the fields:

**physical and chemical analysis of ammonia, urea, UFC85 and melamine;  
selected analysis of water;  
determination (sampling and analysis) of selected inorganic and organic gaseous and  
particulate substances in air emissions**

Abbreviations used: see last page

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**1 Analysis of ammonia**

ISO 7106 1985-06	Liquefied anhydrous ammonia for industrial use; Determination of oil content; gravimetric and infra-red spectrometric methods
ISO 7109 1985-06	Ammonia solution for industrial use; Determination of residue after evaporation at 105 degrees C; Gravimetric method
AOAC 959.02 18 <sup>th</sup> edition 2005	Sampling of anhydrous ammonia
G12A 2015-08	determination of water, oil, ammonia content, nitrogen content, residue, impurities and foreign matters in liquid ammonia

**2 Analysis of urea**

ISO 8397 1988-02	Solid fertilizers and soil conditioners; test sieving
BS EN 15479 2009-01	Fertilizers. Spectrophotometric determination of biuret in urea
AOAC 931.08 18 <sup>th</sup> edition 2005	determination of formaldehyde in urea
AOAC 960.04 18 <sup>th</sup> edition 2005	determination of Biuret (spectrophotometric method)
ASTM E 203 2008	Standard Test Method for Water Using Volumetric Karl Fischer Titration (determination of moisture in urea by Karl-Fischer method)
NSM Rev. 1984-02	determination of formaldehyde in urea
NIOSH 3500 1994	determination of formaldehyde by VIS (modification: <i>only analysis</i> )
U13A 2013-09	determination of formaldehyde in urea



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BS EN 13716 2002-03	Surface active agents. Determination of total base nitrogen. Potentiometric titration (modification: <i>only analysis</i> )
ASTM D 1209 2005	Standard Test Method for Color of Clear Liquids (Platinum- Cobalt Scale)
ASTM D 5630 2013	Standard Test Method for Ash Content in Plastics
M 5A 2013-09	Determination of melamine product purity

**5 Selected analysis of water**

ISO 5815-2 2003-04	Water quality - Determination of biochemical oxygen demand after n days (BOD <sub>n</sub> ) - Part 2: Method for undiluted samples
ISO 7150-1 1984-06	Water quality-Determination of Ammonium - Part1: Manual spectrometric method
ISO 7393-2 2017-12	Water quality - Determination of free chlorine and total chlorine - Part 2: Colorimetric method using N,N-dialkyl-1,4- phenylenediamine, for routine control purposes
ISO 10530 1992	Water quality - Determination of dissolved sulfide - photometric method using methylene blue
ISO 11083 1994-08	Water quality - Determination of chromium (VI) - Spectrometric method using 1,5-diphenyl carbazide.
ISO 11423-1 1997	Water quality - Determination of benzene and some derivatives - Part 1: Head-space gas chromatographic method
ISO 15705 2002-11	Water quality - Determination of the Chemical Oxygen Demand Index (ST-COD) - Small scale sealed tube method (only high range)
DIN EN ISO 11885 2009-07	Water quality - Determination of selected elements by inductively coupled plasma optical emission spectrometry (ICP-OES)

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EN 1899-1 1998-03	Water quality - Determination of biochemical oxygen demand after n days (BOD n ) - Part 1: Dilution and seeding method with allylthiourea acid addition
ASTM D 1783 2001	Standard tests method for Phenolic Compounds in Water
ASTM D 3223 2017	Standard test method for Total Mercury in water
ASTM D 3590 2017	Standard test methods for Total Kjeldhal Nitrogen in water
ASTM D 3867 2009	Standard test methods for nitrite-nitrate in water (only Nitrite)
ASTM D 3921 2003	Standard tests method for Oil and grease and Petroleum Hydrocarbons in water
ASTM D 5086 2013	Standard test method for determination of Calcium, Magnesium, Potassium, and Sodium in atmospheric wet deposition by Flame Atomic Absorption Spectroscopy
ASTM D 5907 2013	Standard test method for filterable matter (Total Dissolved Solids) and non filterable matter (Total Suspended Solids) in water
ASTM D 7573 2017	Standard test method for Total Carbon and Organic Carbon in Water by High Temperature Catalytic Combustion and Infrared Detection
Snamprogetti SP626 2011	Determination of Urea content in water by colorimetry - Diacetylmonoxime method

**6 Determination (sampling and analysis) of selected inorganic and organic gaseous and particulate substances in air emissions**

VDI 3862 Blatt 6 2004-02	Gaseous emission measurement - Measurement of formaldehyde by the acetyl acetone method
ASTM D 3590 2011	Standard Test Methods for Total Kjeldahl Nitrogen in Water Test Method A: Manual Digestion/Distillation (modification: <i>for analysis</i> )

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ASTM D 3685 1998 (reapproval 2005)	Standard test methods for sampling and determination of particulate matter in stack gases (modification: <i>for sampling</i> )
ASTM D 3695 1995 (reapproval 2013)	Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography (modification: <i>for analysis</i> )
ASTM D 6522 2011	Standard test method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentration in Emissions from Natural gas -fired Reciprocating engines, Combustion Turbines, Boilers, and Process Heaters using Portable Analyzers (modification: <i>also SO<sub>2</sub></i> )
ENV-10 2015-02	Determination of Methanol in emissions
ENV-23 2015-02	Determination of Ammonia in emissions

**abbreviations used:**

AOAC	Association of Official Analytical Chemists
ASTM	American Society for Testing and Materials
BS	British Standard
ENV, G, M, U, UF	Laboratory in-house test method of Qatar Fertilizer Company
NIOSH	National Institute for Occupational Safety and Health
NSM	Nederlandse Stikstof Maatschappij B.V., Sluiskil, The Netherlands
UFC	synthetic product of Qatar Fertilizer Company
VDI	Association of German Engineers