



TURKISH ACCREDITATION AGENCY

ACCREDITATION CERTIFICATE

As a Testing Laboratory

**HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ
TİCARET PAZ.LTD.ŞTİ.**

Central Address: ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye

is accredited in accordance with TS EN ISO/IEC 17025:2017 standard within the scope given in Annex following the assessment conducted by TURKAK.

Accreditation Number : AB-0095-T

Accreditation Date : 05.03.2008

Revision Date / Number : 14.04.2023 / 23

This certificate shall remain in force until **21.06.2024**, subject to continuing compliance with the standard **TS EN ISO/IEC 17025:2017**, related regulations and requirements.

Gülden Banu Müderrisoğlu
Secretary General



Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Agreement (MRA) in the scope of ISO/IEC 17025.

This document has been signed by Gülden Banu Müderrisoğlu on {1} with a secure electronic signature in accordance with the electronic signature law numbered 5070. Use the QR code to verify the e-signed document.

Annex of the Certificate (Page 1/39)
Accreditation Scope

 Test TS EN ISO/IEC 17025 AB-0095-T	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
Testing Laboratory		
Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : - Email : info@haliccevre.com Website : https://haliccevre.com/

Environmental Tests		
Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Stack Gas	Stationary Source Emissions-Determination of Mass Concentration of Particulate Matter (20-1000 mg/m ³) Gravimetric Method	TS ISO 9096
Stack Gas	Stationary Source Emissions-Determination of Low Range Mass Concentration of Dust (5-50 mg / m ³) Gravimetric Method	TS EN 13284-1
Stack Gas	Stationary Source Emissions-Determination of Particulate Matter Emissions From Stationary Sources Gravimetric Method	EPA Method 17
Stack Gas	Stationary Source Emissions- Determination of Particulate Matter Emissions from Stationary Sources Gravimetric Method	EPA Method 5
Stack Gas	Stationary Source Emissions-Determination of Sulfuric Acid (H ₂ SO ₄) Vapor, Sulfur Trioxide (SO ₃), Sulfur Dioxide (SO ₂) Titrimetric Method (Barium-Thorin)	EPA Method 8
Stack Gases	Stationary source emissions- Sampling for the automated determination of gas concentrations (CO, CO ₂ , O ₂ , SO ₂ , NOx (NO, NO ₂))	TS ISO 10396*
Stack Gas	Stationary Source Emissions-Determination of the Mass Concentration of Sulfurdioxide (SO ₂) Measurement: Electrochemical Cell Method Measurement: Infrared Absorption Method	TS ISO 7935 *
Stack Gas	Stationary Source Emissions-Determination of Oxygen (O ₂) Mass Concentrations Measurement: Electrochemical Cell Method Measurement: Paramagnetic O ₂ Method Measurement: Zirconium Oxide Method	TS ISO 12039 *
Stack Gas	Stationary Source Emissions-Determination of Mass Concentration of Carbon Monoxide (CO) and Carbon Dioxide (CO ₂) Measurement: Electrochemical Cell Method Measurement: Infrared Absorption Method Measurement: Calculation Method	TS ISO 12039 *
Stack Gas	Stationary Source Emissions-Determination of Nitrogen Monoxide (NO), Nitrogen Dioxide (N ₂) and Nitrogen Oxide (x) Emissions Electrochemical Cell Method	EPA CTM 022 *
Stack Gas	Stationary Source Emissions-Test Method for Smoke Density in Flue Gases from Burning Distillate Fuels Bacharach Method	TS 9503 *
Stack Gas	Stationary Source Emissions-Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts Measurement: S Type Pitot Tube	TS ISO 10780 *
Stack Gas	Stationary Source Emissionss-Determination of Moisture Content in Stack Gases Measurement: Gravimetric Method	EPA Method 4
Stack Gas	Stationary Source Emissions - Age-Dry Thermometer Method with Moisture Content Determination (≤100 °C for Stack Temperature)	In-House Method (TA.35 Rev.03)*
Stack Gas	Stationary Source Emissions-Determination of Moisture Content with Moisture Meter Probe (≤180 °C for Stack Temperature)	In-House Method (TA.34 Rev.07)*


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 <p>Test TS EN ISO/IEC 17025 AB-0095-T</p>	<p>HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.</p> <p>Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023</p>	
	<p>Testing Laboratory</p> <p>Address : ALI KUSÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye</p> <p>Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/</p>	
Stack Gas	<p>Stationary source emissions- Determination of the mass concentration of individual gaseous organic compounds</p> <p>Acetic acid, Methanol, 1,2-Dichloroethane, 1,4-Dioxane, Pyridine</p> <p>Sampling: Sampling Tube (Activated Carbon) Pretreatment: Solvent Desorption Method Measurement: GC-FID Method</p>	TSE CEN/TS 13649
Stack Gas	<p>Stationary source emissions- Determination of the mass concentration of individual gaseous organic compounds</p> <p>1,1,1,2-tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane, 1,1-dichloropropene, 1,2,3-Trichloropropane, 1, 2,3-Trimethylbenzene, 1,2,3-trichlorobenzene, 1,2-dibromoethane, 1,2-Dichlorobenzene, 1,1-Dichloroethane, cis-1,2-Dichloroethane, 1,2-dichloropropane, 1,3, 5-Trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloropropane, 1,4-Dichlorobenzene, 1-Methoxy-2-propanol, 2,2-dichloropropane, 2,6-Dimethyl-4-heptanone, 4-chlorotoluene, 2-Hexanone, 2-Methyl-1-propanol, 3-Heptanone, 2-chlorotoluene, 4-isopropyltoluene, Acetic acid n-propyl ester, Acetic acid-isobutyl ester, Acrylic acid-ethyl ester, alpha-Methylstyrene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromomethane, Chlorobenzene, Chloromethane, 1,2-Dichloroethane (Cis-/Trans), Cis-1,3-Dichloropropene, Dibromochloromethane, Dibromomethane, Dichlorodifluoromethane, Epichlorohydrin, Hexachlorobutadiene, Hexachloroethane, Iso propylbenzene, Methyl Acetate, Naphthalene, n-Butylbenzene, Sec-Butylbenzene, Tert-Butylbenzene, Tetrachloroethene, Tetrachloromethane, Trans-1,3-Dichloropropene, Tribromomethane, Trichlorofluoromethane, Vinylchloride, 2-Pentanone, 2,3-Dimethylheptane, 2,3-Dimethylpentane, 1,3-Butadiene, 1,2-Dibromo-3-Chloropropane, 1,2,4-Trichlorobenzene, Vinyl Acetate, Aniline, Ter- Butylmethylether, Octane, Acetyl Acetone, 2-Heptanone, Butyl Glycol, Phenol</p> <p>Sampling: Sampling Tube (Activated Carbon) Pretreatment: Solvent Desorption Method Measurement: GC-MS Method</p>	TSE CEN/TS 13649
Stack Gas	<p>Stationary source emissions - Determination of the mass concentration of individual gaseous organic compounds</p> <p>1,2-Trichloroethane, 1,2,4-Trimethylbenzene, 1,2-Dichloroethane, 1-Butanol, 1-Propanol, 2-Butanone, 2-Propanol, 4-Methyl-2-Pentanone, 5-Methyl-3-Heptanone, Acetone, Acetonitrile, Benzene, Chloroform, Cyclohexanone, Dichloromethane, Diethylether, Ethanol, Ethyl Acetate, Ethylbenzene, n-Hexane, Isopropylacetate, Methylcyclohexane, Mp-Xylene, n-Butyl Acetane, n-Penene Xylene, Cyclohexane, Styrene, Tetrahydrofuran, Toluene, Trichloroethylene, Chlorobenzene, n-Heptane, 2-Methoxyethanol</p> <p>Sampling: Sampling Tube (Activated Carbon) Pretreatment: Solvent Desorption Method Measurement: GC-FID /GC-MS Method</p>	TSE CEN/TS 13649
Stack Gas	<p>Stationary Source Emissions-for Determination of Total Fluoride (F) Emissions</p> <p>Spectrophotometric (SPADNS-Zirconium) Method</p>	EPA Method 13 A
Stack Gas	<p>Stationary Source Emissions-Determination of Mass Concentration of Gaseous Chlorides expressed as HCl</p> <p>Measurement: Spectrophotometric Method Measurement: Ion Chromatography Method</p>	TS EN 1911
Stack Gas	<p>Stationary Source Emissions-Ammonia Determination</p> <p>Ion Selective Electrode Method</p>	SCAQMD Method 207.1
Stack Gas	<p>Stationary Source Emissions-Determination of Formaldehyde Emissions From Natural Gas-Fired, Stationary Combustion Sources</p> <p>Spectrophotometric Method</p>	EPA Method 323
Stack Gas	<p>Stationary Source Emissions-Determination of Formaldehyde Emissions in the Mineral Wool and Wool Fiberglass Industries</p> <p>Spectrophotometric (Pararosaniline) Method</p>	EPA Metot 316
Stack Gas	<p>Determination Of Heavy Metals Emissions From Stationary Sources</p> <p>Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chrome (Cr), Cobalt (Co), Copper (Cu), Lead (Pb), Manganese (Mn), Mercury (Hg), Nickel (Ni), Phosphorus (P), Selenium (Se), Silver (Ag), Thallium (TI), Zinc (Zn)</p> <p>Preparation: Extracting Measurement: AAS Method</p>	EPA Method 29
Stack Gas	<p>Stationary Source Emissions-Determination of Hydrogen Cyanide (HCN)</p> <p>Spectrophotometric Method</p>	CARB 426

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Stack Gas	Stationary Source Emissions- Determination of Hydrogen Sulfide (H ₂ S) Content of Fuel Gas Streams in Petroleum Refineries Titrimetric Method	EPA Method 11
Stack Gas	Stationary Source Emissions- Determination of Nitrogen Monoxide (NO), Nitrogen Dioxide (NO ₂) and Nitrogen Oxide (NO _x) Determination Spectrophotometric (Alkaline Permanganate/Colorimetric) Method	EPA Method 7C
Stack Gas	Stack Emissions-Determination of Nitrogen Monoxide (NO), Nitrogen Dioxide (NO ₂) and Nitrogen Oxide (NO _x) IC Method (Alkaline Permanganate/Colorimetric)	EPA Method 7D
Stack Gas	Stationary Source Emissions-Bacar Gas in low concentrations of the gas in low concentrations, the determination of the mass concentration of the total organic carbon FID analyzer	TS EN 12619 *
Stack Gas	Stationary Source Emissions- Determination of Total Organic Gas (TOG) Concentration FID Analyzer	EPA Method 25 A *
Stack Gas	Stationary Source Emissions - Determination Of Heavy Metal Vanadium (V)) Emissions Preparation: Extracting Measurement: AAS Method	TS EN 14385
Stack Gas	Stationary Source Emissions-Determination of Phosphoric Acid Vapor Spectrophotometric Method	NMX-AA-90-1986
Stack Gas	Stationary Source Emissions-Determination of Chromium VI (Cr ⁺⁶) Spectrophotometric Method	CARB 425
Stack Gases	Determination of Methane Gas (CH ₄) Emissions From Stationary Sources Measurement: Electrochemical Cell Method	In-House Method-"TA.307.Re v.00"
Stack Gases	Silica Sampling and Determination (SiO ₂) Sampling: Sampling on filter by the pump Spectrophotometre	In-House Method-"Ta.339 Rev.01" (Niosh 7602:2017)
Stack Gases	Determination of Phosphine Sampling: Sampling on sorbent tube by the pump Analysis: Spectrophotometric Method	In-House Method-"Ta353 Rev.01" (NIOSH 6002:2015)
Stack Gas	Stationary source emissions - Sampling PCDDs/PCDFs and Dioxins PCBs Compounds Chart 1:Sampling	TS EN 1948-1
Stack Gas	Stationary source emissions - Sampling Gas and Polycyclic Aromatic Hydrocarbons (PAH) Compounds on the form of particule.	ISO 11338-1
Stack Gas	Stationary source emissions- Determination of Polycyclic in Gas and Particulate Phases Analysis of Mass Concentration of Aromatic Hydrocarbons (PAH) Naphthalene, Asenaphthylene, Asenaften, Florence Phenanthrene, Anthracene, Pyrene, Florentine, Benzo(a) anthracene, Krisen, Benzo(a) pyrene, Benzo(k) fluoranthene, Benzo(b) fluoranthene, Indeno (1,2,3-c, d) pyrene, Dibenzo (a, h) anthracene, Benzo (g, h, i) perylene, Benzo(e)pyrene, Perylene Pre-Treatment: Extraction and Cleaning Measurement: GC-MS Method	ISO 11338-2
Stack Gas	Stationary Source Emissions-Sampling Train of Semi-Volatile Organic Compounds Sampling: Sample to XAD-2	EPA 0010

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Stack Gas	Stationary source emissions- Determination of Semi-Volatile Organic Compounds (sVOC) 1,2- Dichlorobenzene, 1,4- Dichlorobenzene, 1,2,4-trichlorobenzene, Phenol, Hexachloroethane, Hexachlorobutadiene, Naphthalene Sampling: Sampling to XAD-2 Pre-Treatment: Extraction and Cleaning Measurement: GC-MS Method	EPA 0010 EPA Method 3542 A EPA Method 8270 E
Stack Gas	Determination of Calcium Oxide (CaO) and Magnesium Oxide (MgO)	In-House Method -"Ta.354 Rev.00" (Epa 29:2017)
Stack Gas	Stack Emissions-Determination of Stack Gas Velocity and Volumetric Flow Rate S Type Pitot Tube	EPA Method 2 *
Stack Gas	Stationary Source Emissions-for Determination of Hydrogen Halide and Halogen (HCl, HF, HBr, Cl ₂ , Br ₂) Emissions Sampling: Isokinetic Method Measurement: IC Method	EPA Method 26A
Imission (Ambient Air)	Determination of Particulate Matter as PM10 in the Atmosphere Gravimetric Method	EPA 40 CFR 50 Appj
Imission (Ambient Air)	Determination of PM2,5 mass concentrations of suspended particulate matter in ambient air Gravimetric Method	EPA 40 CFR 50 AppL
Imission (Ambient Air)	Determination of Heavy Metals in PM 10 (As, Cd, Ni, Pb) Measurment: GF- AAS Method	TS EN 14902 TS EN 14902/AC
Imission (Ambient Air)	Determination of the PM10 or PM2,5 Mass Concentration of Suspended Particulate Matter Gravimetric Method	TS EN 12341
Imission (Ambient Air)	Determination of Heavy Metals in PM 10 (Al, As,Ba, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Sn, Tl, V, Zn) GF-AAS Method	VDI 2267 Chapter 1
Imission (Ambient Air)	Determination of Heavy Metals in Precipitated Dust Al, As, Ba, Cd, Co, Cr, Cu, Mn, Ni, Pb, Se, Sn, V, Sb, Tl ve Zn GF- AAS Metodu	VDI 2267 Chapter 2
Imission (Ambient Air)	Determination of Cd, Co, Cr, Cu, Ni, Pb, Sb, V and Zn in precipitated dust Atomic Absorption Method	VDI 2267 Chapter 16
Imission(Ambient Air)	Determination of Settled Particulate Matter Gravimetric Method	TS 2341
Imission (Ambient Air)	Determination of (gas and particle-phase)polycyclic aromatic hydrocarbons (PAH) Naphthalene, Asenaphthylene, Asenaften, Florence, Phenanthrene, Anthracene, Pyrene, Florentine, Benzo(a) anthracene, Krisen, Benzo(a) pyrene, Benzo(k) fluoranthene, Benzo(b) fluoranthene, Indeno (1,2,3-c, d) pyrene, Dibenzo (a, h) anthracene, Benzo (g, h, i) perylene, Benzo(e)pyrene, Perylene Measurement: GC-MS Method	TS ISO 12884 (Madde 10 Hariç)
Imission(Ambient Air)	Sampling Atmospheres to Collect Organic Compound Vapors Sampling: Activated Carbon Tube	ASTM D3686

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Imission(Ambient Air)	Determination of volatile organic compounds Sampling on active carbon by the pump Ethanol, n-Pentane, 2-Propanol, Acetone, Dichloro methane, Methanol, Vinyl acetate, n-Hexane, Butanone, Chloroform, Dichloro ethane, Butanol, Benzene, Trichlorethylene, n-Heptane, Pridine, Toluene, n-Octane, n-Butyl acetate, Monochloro benzene, Ethyl benzene, m-Xylene, p-Xylene, o-Xylene, Styrene, Phenol, Aniline, Butyl glycol, Isopropylacetate, Acetonitrile, Diethyl ether, Acetic acid, Diethylamine, 1-Propanol, Tertbutylmethylether, Ethylacetate, 2-Methoxyethanol, Tetrahydrofuran, Cyclohexane, 1-Methoxy-2-propanol, Triethylamine, 1,4 -Dioxane, Methylcyclohexane, Isobutylmethylketon, Acetylacetone, 1,1,2 -Trichloroethane, 1,2,4-Trichlorobenzene, 2 -Heptanone, Cyclohexanone, 5-Methyl-3 -heptanone, Propylbenzene, 1,2,4 -Trimethylbenzene (GC / FID)	ASTM D3687
Imission (Ambient Air)	Determination of NO ₂ Concentration Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection of Device and Sampling Points Analysis: IC Method Analysis: Spectrophotometer	TS EN 13528 1,2,3 In-House Method "TA.338.Rev.03"
Imission (Ambient Air)	Determination of HCl Concentrations Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection of Device and Sampling Points Analysis: IC Method	TS EN 13528 1,2,3 In-House Method "TA.392.Rev.00"
Imission (Ambient Air)	Determination of HF Concentrations Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection of Device and Sampling Points Analysis: IC Method	TS EN 13528 1,2,3 In-House Method "TA.393.Rev.00"
Imission (Ambient Air)	Determination of SO ₂ Concentrations Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection of Device and Sampling Points Analysis: IC Method	TS EN 13528 1,2,3 In-House Method "TA.394.Rev.00"
Imission (Ambient Air)	Determination of NH ₃ Concentrations Sampling: Selection of Diffusion Devices, Conveying and Uncertainty Components Device Selection and Selection of Sampling Points Measurement: Spectrophotometer Method	TS EN 13528 1,2,3 In-House Method "TA.395.Rev.00"
Imission (Ambient Air)	Determination of O ₃ Concentrations Sampling: Selection of Diffusion Devices, Conveying and Uncertainty Components Device Selection and Selection of Sampling Points Measurement: Spectrophotometer Method	TS EN 13528 1,2,3 In-House Method "TA.396.Rev.00"
Imission (Ambient Air)	Sampling and Determination of BTEX Concentration ((Benzene, Toluene, Ethylbenzene, Xylene (m, p, o) Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection of Device and Sampling Points Analaysis: GC-FID Method	In-House Method- "TA.344.Rev.01" (TS EN 13528 1,2,3)
Imission(Ambient Air)	Sampling And Determination Of Volatile Organic Compounds Concentration Asetik asit, Metanol, Pridin, 1,4-Dioksan Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection of Device and Sampling Points Analaysis: GC-FID Method	In-House Method- "TA.344.Rev.01" (TS EN 13528 1,2,3)


Annex of the Certificate (Page 6/39)
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<p>Imission(Ambient Air)</p>	<p>Determination of Volatile Organic Compounds (VOC)</p> <p>1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane, 1,1-Dichloropropene, 1,2,3-Trichloropropane, 1, 2,3-Trimethylbenzene, 1,2,3-Trichlorobenzene, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,1-Dichloroethane, Cis-1,2-Dichloroethene, 1,2-Dichloropropane, 1,3, 5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 2,6-Dimethyl-4-Heptanone, 4-Chlorotoluene, 2-Hexanone, 2-Methyl-1-Propanol, 3-Heptanone, 2-Chlorotoluene, 4-Isopropyltoluene, Acetic acid n-propyl ester, Acetic acid-isobutyl ester, Acrylic acid-ethyl ester, Alpha-Methylstyrene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromomethane, Chloromethane, 1,2-Dichloroethane (Cis-/Trans), Cis-1,3-Dichloropropene, Dibromochloromethane, Dibromomethane, Dichlorodifluoromethane, Epichlorohydrin, Hexachloroethane, Isopropylbenzene, Methyl Acetate, Naphthalene, n-Butylbenzene, Sec-Butyl-Butylbenzene, Terechlorobenzene, Tetrachloromethane, Trans-1,3-Dichloropropene, Tribromomethane, Trichlorofluoromethane, Vinylchloride, 2-Pentanone, He Xachlorobutadiene, Acetylacetone, 2-Heptanone, Butylglycol, Aniline, Phenol, Vinylacetate, 1,2,4 Trichlorobenzene, 1,2-dibromo-3-chloropropane, Olefins (2,3-Dimethylheptane, 2,3-Dimethylpentane, 1,3-Butadiene)</p> <p>Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection Measurement: GC-MS Method</p>	<p>In-House Method- "TA.344.Rev.01" (TS EN 13528 1,2,3)</p>
<p>Imission(Ambient Air)</p>	<p>Determination of Volatile Organic Compounds (VOC)</p> <p>1,1,2-Trichloroethane, 1,2,4-Trimethylbenzene, 1-Butanol, 1-Propanol, 2-Butanone, 2-Propanol, 4-Methyl-2-Pentanone, 5-Methyl-3-Heptanone, Acetone, Acetonitrile, Benzene, Chloroform, Cyclohexanone, Dichloromethane, Diethylether, Ethanol, Ethyl Acetate, Ethylbenzene, n-Hexane, isopropylacetate, methylcyclohexane, mp-xylene, n-Butyl acetate, n-Pentane, propylbenzene, o-xylene, o-xylene Toluene, Chlorobenzene, 1-Methoxy-2-Propanol, 1,2-Dichloroethane, Trichloroethylene, 2-Methoxyethanol, Olefins (Tertbutylmethylether, Cyclohexane, Octane, n-Heptane)</p> <p>Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection Measurement: GC-MS/GC-FID Method</p>	<p>In-House Method- "TA.344.Rev.01" (TS EN 13528 1,2,3)</p>
<p>Imission (Ambient Air)</p>	<p>Sampling and Determination of H₂S Concentration</p> <p>Sampling: Selection of Diffusion Devices, Transport and Uncertainty Components Selection of Device and Sampling Points Spectrophotometer</p>	<p>In-House Method- "TA.342 Rev.00" (TS EN 13528 1,2,3)</p>
<p>Imission (Ambient Air)</p>	<p>Determination of Mercaptan Content in Atmosphere Spectrophotometric Method</p>	<p>TS 9628</p>
<p>Imission(Ambient Air)</p>	<p>Sampling and Selection of Diffusion Devices, Transport and Uncertainty Components Selection of Device and Sampling Points (NO_x, Formaldehyde, HCl, HF, NH₃, NH_x, O₃, SO₂)</p>	<ul style="list-style-type: none"> • TS EN 13528-1 • TS EN 13528-2 • TS EN 13528-3
<p>Acoustic-Noise</p>	<p>Description, measurement and assessment of environmental noise-Part 1: Basic quantities and assessment procedures</p>	<p>TS ISO 1996-1</p>
<p>Acoustic-Noise</p>	<p>Description, measurement and assessment of environmental noise-Part 2: Determination of sound pressure levels</p>	<p>TS ISO 1996-2</p>
<p>Acoustic-Noise</p>	<p>Safety of industrial trucks - Test methods for measuring noise emissions (L_{PA}, L_{WA})</p>	<p>TS EN 12053+A1</p>
<p>Acoustic-Noise</p>	<p>Determination of sound power levels (ΔL_s, ΔL_F, ΔL_M, ΔL_G, L_{PA}, L_w) of multisource industrial plants for evaluation of sound pressure levels in the environment</p>	<p>TS ISO 8297</p>
<p>Acoustic-Noise</p>	<p>Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane</p>	<p>TS EN ISO 3744</p>
<p>Acoustic-Noise</p>	<p>Determination of sound power levels and sound energy levels of noise sources using sound pressure - Survey method using an enveloping measurement surface over a reflecting plane</p>	<p>TS EN ISO 3746</p>
<p>Acoustic-Noise</p>	<p>Attenuation of sound during propagation outdoors - Part 2: General method of calculation</p>	<p>TS ISO 9613-2</p>
<p>Acoustic-Noise</p>	<p>Framework for calculating a distribution of sound exposure levels for impulsive sound events for the purposes of environmental noise assessment</p>	<p>ISO 13474</p>


Accreditation Scope

 Test TS EN ISO/IEC 17025 AB-0095-T	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
Testing Laboratory		
Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Vibration	Air Blast and Ground Vibration Measuring in Mining (a, v)	TS 10354
Vibration	Measurement and evaluation of machine vibration - Part 5: Machine sets in hydraulic power generating and pump-storage plants	ISO 20816-5
Vibration	Measurement of vibrations and evaluation of their effects on buildings (rr, a, V)	TS ISO 4866
Water	Sampling of Rivers and Streams	TS EN ISO 5667-6
Water	Sampling of Lakes,Natural and Man-Made	TS ISO 5667-4
Water	Sampling of Groundwaters	TS ISO 5667-11
Water	Sampling on Wet Deposition	TS ISO 5667-8
Water	Sampling for Microbiological Analysis	TS EN ISO 19458
Water	Sampling of Drinking Water from Treatment Works and Piped Distribution Systems	TS ISO 5667-5
Water	Determination of pH Electrometric Method	SM 4500 H+ B
Water	Determination of Temperature Laboratory and Field Method	SM 2550 B
Water	Determination of Conductivity Laboratory Method	SM 2510 B
Water	Determination of Turbidity Nephelometric Method	SM 2130 B
Water	Determination of Light Transmittance/Secchi Disc Depth Measurement: Disk Method	EPA 841-B-97-003
Water	Determination of Salinity Electrical Conductivity Method	SM 2520 B
Water	Determination of Dissolved Oxygen Membrane Electrode Method	SM 4500-O G
Water	Determination of Mercury (Hg) Pre-Treatment: Extraction with Nitric Acid Pre-Treatment: Microwave Assisted Extraction Method Measurement: AAS-Cold Vapor Atomic Absorption Method	SM 3112 B SM 3030 E SM 3030 K

Accreditation Scope

 <p>Test TS EN ISO/IEC 17025 AB-0095-T</p>	<p>HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.</p> <p>Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023</p>	
	<p>Testing Laboratory</p>	
	<p>Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye</p>	<p>Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/</p>
Water	Determination of Dissolved Oxygen Luminescent Sensor Method	ASTM D888 Method C
Water	Determination of Silver(Ag), Gold (Au), Calcium (Ca), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Magnesium (Mg), Manganese (Mn), Nickel (Ni), Lead (Pb), Antimony (Sb), Tin (Sn), Thallium (Tl), Zinc (Zn), Sodium (Na), Potassium (K) Pre-Treatment: Extraction with Nitric Acid Pre-Treatment: Microwave Assisted Extraction Method Measurement: AAS-Direct Air-Acetylene Flame method	SM 3030 E SM 3030 K SM 3111 B
Water	Determination of Silver (Ag), Aluminum (Al), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Selenium (Se), Antimony (Sb), Tin (Sn) Pre-Treatment: Extraction with Nitric Acid Pre-Treatment: Microwave Assisted Extraction Method Measurement: AAS-Graphite Furnace Spectrometer Method	SM 3030 E SM 3030 K SM 3113 B
Water	Determination of Aluminum (Al), Barium (Ba), Beryllium (Be), Calcium (Ca), Molybdenum (Mo) Pre-Treatment: Extraction with Nitric Acid Pretreatment: Microwave Assisted Extraction Method Measurement: AAS-Direct Nitrous Oxide Acetylene Flame Method	SM 3030 E SM 3030 K SM 3111 D
Water	Determination of Suspended Solids (SS) Gravimetric Method	SM 2540 D
Water	Determination of Total Solids Gravimetric Method	SM 2540 B
Water	Determination of Settleable Solids Volumetric Method	SM 2540 F
Water	Determination of Fixed and Volatile Solids Gravimetric Method	SM 2540 E
Water	Determination of Total Dissolved Solids (TDS) Gravimetric Method	SM 2540 C
Water	Determination of Chemical Oxygen Demand (COD) Open Reflux-Titrimetric Method	SM 5220 B
Water	Determination of Chemical Oxygen Demand (COD) Open Reflux-Titrimetric Method	TS 2789
Water	Determination of Biochemical Oxygen Demand (BOD) 5-Day BOD Test	SM 5210 B


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	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
Testing Laboratory		
Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Water	Determination of Total Kjeldahl Nitrogen Macro Kjeldahl Method	SM 4500-N _{org} B
Water	Determination of Ammonium/Ammonium Nitrogen Pretreatment: Distillation Method Analysis: Spectrophotometric Method	SM 4500-NH ₃ B SM 4500-NH ₃ F
Water	Determination of Ammonium/Ammonium Nitrogen Pretreatment: Distillation Method Analysis: Titrimetric Method	SM 4500-NH ₃ B SM 4500-NH ₃ C
Water	Determination of Alkalinity Titrimetric Method	SM 2320 B
Water	Determination of m Alkalinity - p Alkalinity Titrimetric Method	SM 2320 B
Water	Determination of Free / Total Carbon Dioxide Calculation Method	SM 4500 CO ₂ D SM 4500 CO ₂ D
Water	Determination of Fluoride Pretreatment: Distillation Method Analysis: SPADNS Method	SM 4500-F B SM 4500-F D
Water	Determination of Chloride Titrimetric Method	SM 4500-Cl ⁻ B
Water	Determination of Chloride Titrimetric Method	SM 4500-Cl ⁻ C
Water	Sulphate Determination Gravimetric Method	SM 4500 SO ₄ ²⁻ C
Water	Sulphate Determination Gravimetric Method	SM 4500 SO ₄ ²⁻ D
Water	Sulphate Determination Spectrophotometric Method	SM 4500 SO ₄ ²⁻ E


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Testing Laboratory		
	Address : ALİ KUŞCU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye	Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
total alkalinity	Determination of Bromide, Fluoride, Chloride, Nitrate / Nitrate Nitrogen, Nitrite / Nitrite Nitrogen, Orthophosphate, Phosphate / Phosphate Phosphorus, Sulphate Ion Chromatography (IC)	TS EN ISO 10304-1
Water	Determination of Fluoride, Chloride, Bromide, Nitrite / Nitrite Nitrogen, Nitrate / Nitrate Nitrogen, Orthophosphate, Phosphate / Phosphate Phosphorus, Sulphate Ion Chromatography (IC)	SM 4110 B
Water	Determination of Bromate, Chlorate, Chlorite Ion Chromatography (IC)	SM 4110 D
Water	Determination of Color Spectrophotometric Method	SM 2120 C
Water	Determination of Color Spectrophotometric Method	TS EN ISO 7887 B
Water	Nitrate/Nitrate Nitrogen Determination Spectrophotometric Method	SM 4500-NO ₃ ⁻ B
Water	Determination of Nitrate/Nitrate Nitrogen Spectrophotometric Method	SM 4500-NO ₃ ⁻ E
Water	Determination of Total Cyanide Pretreatment: Distillation Method Analysis: Spectrophotometric Method	SM 4500-CN C SM 4500-CN E
Water	Determination of Free Cyanide Spectrophotometric Method	SM 4500-CN E
Water	Determination of Chromium (VI) Spectrophotometric Method	SM 3500-Cr B
Water	Determination of Nitrite/Nitrite Nitrogen Spectrophotometric Method	SM 4500-NO ₂ ⁻ B
Water	Determination of Sulphide Titrimetric Method	SM 4500 SO ₃ ²⁻ B
Water	Determination of Sulphide Spectrophotometric Method	SM 4500 SO ₃ ²⁻ C

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Testing Laboratory		
	Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye	Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Water	Determination of Oil and Grease Pretreatment: Sokslet Extraction Method Analysis: Gravimetric Method	SM 5520 D
Water	Determination of Bound Chlorine Spectrophotometric Method	SM 4500-Cl G
Water	Determination of Total Chlorine Spectrophotometric Method	SM 4500-Cl G
Water	Determination of Free Chlorine Spectrophotometric Method	SM 4500-Cl G
Water	Determination of Free Chlorine Spectrophotometric Method	TS EN ISO 7393-2
Water	Determination of Total Chlorine Spectrophotometric Method	TS EN ISO 7393-2
Water	Determination of Bound Chlorine Spectrophotometric Method	TS EN ISO 7393-2
Water	Determination of Phenol Pretreatment: Distillation Method Analysis: Spectrophotometric Method	SM 5530 B SM 5530 D
Water	Determination of Sulphide Spectrophotometric Method	SM 4500-S ²⁻ D
Water	Determination of Sulphide Titrimetric Method	SM 4500-S ²⁻ F
Water	Determination of Total Phosphorus Pretreatment: Extraction Method Analysis: Spectrophotometric Method	SM 4500-P B SM 4500-P D

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 Test TS EN ISO/IEC 17025 AB-0095-T	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
Testing Laboratory		
Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Water	Determination of Phosphate/Phosphate Phosphorus Spectrophotometric Method	SM 4500-P D
Water	Determination of Hydrazine Spectrophotometric Method	ASTM D1385-07
Water	Determination of Hydrocarbons Pretreatment: Sokslet Extraction Method Analysis: Gravimetric Method	SM 5520 D and F
Water	Determination of Vanadium (V) Pre-Treatment: Extraction with Nitric Acid Pre-Treatment: Microwave Assisted Extraction Method Measurement: AAS-Graphite Furnace Spectrometer Method	SM 3030 E SM 3030 K ASTM D3373
Water	Determination of Hardness EDTA Titrimetric Method	SM 2340 C
Water	Determination of Calcium (Ca) EDTA Titrimetric Method	SM 3500-Ca B
Water	Determination of Magnesium Spectrophotometric Method	SM 3500-Mg B
Water	Determination of Permanganate Index Titrimetric Method	TS 6288 EN ISO 8467
Water	Determination of Polyaromatic Hydrocarbons (PAH) Naphthalene, Asenaphthylene, Asenaften, Florence, Phenanthrene, Anthracene, Pyrene, Florentine, Benzo(a) anthracene, Krisen, Benzo(a) pyrene, Benzo(k) fluoranthene, Benzo(b) fluoranthene, Inden (1,2,3-c, d) pyrene, Dibenzo (a, h) anthracene, Benzo (g, h, i) perylene, Benzo(e)pyrene, Perylene Pre-Treatment: Liquid-Liquid Extraction Measurement:GC-MS Method	EPA 8270 E EPA 3510 C EPA 3630 C
Water	Determination of Surfactant (MBAS) Pretreatment: Seperation with Sublation Apparatus Analysis: Spectrophotometric Method	SM 5540 B SM 5540 C
Water	Determination of Boron (B) Spectrophotometric Method	TS 3661
Water	Determination of Chlorophyll-a Spectrophotometric Method	SM 10200 H

 <p>HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.</p> <p>Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023</p>		
Testing Laboratory		
Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Water	Determination of Chlorophyll-a Spectrophotometric Method	TS 9092 ISO 10260
Waste Water	Sampling techniques	TS ISO 5667-10
Waste Water	Determination of warmth Laboratory and Field Method	SM 2550 B
Waste Water	pH Determination Electrometric Method	SM 4500 H ⁺ B
Waste Water	Conductance Laboratory Method	SM 2510 B
Waste Water	Salinity Electrical Conductivity Method	SM 2520 B
Waste Water	Blur Determination Nephelometric Method	SM 2130 B
Waste water	Determination of Light Transmittance/Secchi Disc Depth Measurement: Disc Method	EPA 841-B-97-003
Waste Water	Determination of dissolved oxygen Membrane Electrode Method	SM 4500-O G
Waste Water	dissolved oxygen Determination luminescent sensor Method	ASTM D888 Method C
Waste Water	Mercury(Hg) Determination Pre-process: Cold evaporation Measurement: AAS Method	SM 3030 E SM 3030 K SM 3112 B
Waste Water	Determination of Silver(Ag), Gold (Au), Calcium (Ca), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Magnesium (Mg), Manganese (Mn), Nickel (Ni), Lead (Pb), Antimony (Sb), Tin (Sn), Thallium (Tl), Zinc (Zn), Sodium (Na), Potassium (K) Pre-Treatment: Extraction with Nitric Acid Pre-Treatment: Microwave Assisted Extraction Method Measurement: AAS-Direct Air-Acetylene Flame method	SM 3030 E SM 3030 K SM 3111 B

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 <p>HALİÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.</p> <p>Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023</p>		
Testing Laboratory		
Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Waste Water	Determination of Silver (Ag), Aluminum (Al), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Selenium (Se), Antimony (Sb), Tin (Sn) Pre-Treatment: Extraction with Nitric Acid Pre-Treatment: Microwave Assisted Extraction Method Measurement: AAS-Graphite Furnace Spectrometer Method	SM 3030 E SM 3030 K SM 3113 B
Waste Water	Determination of Aluminum (Al), Barium (Ba), Beryllium (Be), Calcium (Ca), Molybdenum (Mo) Pre-Treatment: Extraction with Nitric Acid Pretreatment: Microwave Assisted Extraction Method Measurement: AAS-Direct Nitrous Oxide Acetylene Flame Method	SM 3111 D SM 3030 K SM 3030 E
Waste Water	Solid(AKM) Determination Gravimetric Method	SM 2540 D
Waste Water	Determination of Total solids Gravimetric Method	SM 2540 B
Waste Water	Total Dissolved Substance(TDS) Determination Gravimetric Method	SM 2540 C
Waste Water	Collapsible Solid Article(CSA) Determination Volumetric Method	SM 2540 F
Waste Water	Needs of chemical oxygen(KOI) Determination Open Reflaks-Titrimetric Method	TS 2789
Waste Water	Hard and volatile solid Determination Gravimetric Method	SM 2540 E
Waste Water	Needs of chemical oxygen(KOI) Determination Open Reflaks-Titrimetric Method	SM 5220 B
Waste Water	Total Kjeldahl Nitroo(TKN) Determination Macro Kjeldahl Method	SM 4500-N _{org} B
Waste Water	Biological Oxygen Need(BOI) Determination 5-day BOI test	SM 5210 B
Waste Water	Ammonium / Ammonium Nitrogen Determination Pre-process: Distillation Method Measurement: Spectrophotometric Method	SM 4500-NH ₃ B SM 4500-NH ₃ F


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 <p>Test TS EN ISO/IEC 17025 AB-0095-T</p>	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
Testing Laboratory		
Address : ALI KUŞCU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Waste Water	Ammonium / Ammonium Nitrogen Determination Pre-process: Distillation Method Measurement: Titrimetric Method	SM 4500-NH ₃ B SM 4500-NH ₃ C
Waste Water	Determination of Alkalinity Titrimetric Method	SM 2320 B
Waste Water	m Alkalinity - p Alkalinity Determination Titrimetric Method	SM 2320 B
Waste Water	Determination of Alkalinity and Carbon Dioxide (CO ₂) by Carbon Dioxide and Its Forms Titrimetric Method	SM 4500-CO ₂ D
Waste Water	Fluoride Determination Pre-process: Distillation Method Measurement: SPADNS Method	SM 4500-F B SM 4500-F D
Waste Water	Chloride Determination Titrimetric Method	SM 4500-Cl ⁻ B
Waste Water	Chloride Determination Titrimetric Method	SM 4500-Cl ⁻ C
Waste Water	Sulphate Determination Gravimetric Method	SM 4500-SO ₄ ²⁻ C
Waste Water	Sulphate Determination Gravimetric Method	SM 4500 SO ₄ ²⁻ D
Waste Water	Sulphate Determination Spectrophotometric Method	SM 4500 SO ₄ ²⁻ E
Waste Water	Determination of Bromide, Fluoride, Chloride, Nitrate / Nitrate Nitrogen, Nitrite / Nitrite Nitrogen, Orthophosphate, Phosphate / Phosphate Phosphorus, Sulphate Ion Chromatography (IC) Method	TS EN ISO 10304-1
Waste Water	Bromide, fluoride, chloride, nitrate, Nitrite, orthophosphate, sulphate Determination IC Method	SM 4110 B
Waste water	Determination of Bromate, Chlorate, Chlorite Ion Chromatography (IC)	SM 4110 D


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Testing Laboratory		
Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Waste Water	Color Determination Spectrophotometric Method	TS EN ISO 7887 B
Waste Water	Color Determination Spectrophotometric Method	SM 2120 C
Waste water	Determination of Nitrate/Nitrate Nitrogen Spectrophotometric Method	SM 4500-NO ₃ B
Waste Water	Nitrate /Nitrate Nitrogen Determination Spectrophotometric Method	SM 4500-NO ₃ ⁻ E
Waste Water	Total Determination of Cyanide Pre-process: Distillation Method Measurement: Spectrophotometric Method	SM 4500-CN C SM 4500-CN E
Waste Water	Free Cyanide Determination Spectrophotometric Method	SM 4500-CN E
Waste Water	Krom(VI) Tayini Spectrophotometric Method	SM 3500-Cr B
Waste Water	Nitrite / Nitrite Nitrogen Spectrophotometric Method	SM 4500-NO ₂ ⁻ B
Waste Water	Sulphide Determination Titrimetric Method	SM 4500 SO ₃ ²⁻ B
Waste Water	Sulphide Determination Spectrophotometric Method	SM 4500 SO ₃ ²⁻ C
Waste Water	Determination of Oil and Grease Pre-process: Sokslet Extraction Method Measurement: Gravimetric Method	SM 5520 D
Waste Water	Fish biodeen(ZSF) Determination	Regulation of Water Pollution Control Communique on Sampling and Analysis Methods Annex-1


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Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Waste Water	Free Chlorine Determination Spectrophotometric Method	SM 4500-Cl G
Waste Water	Total Chlorine Determination Spectrophotometric Method	SM 4500-Cl G
Waste water	Determination of Residual Chlorine Spectrometric Method	SM 4500-Cl G
Waste water	Determination of Total Chlorine Spectrophotometric Method	TS EN ISO 7393-2
Waste water	Free Chlorine Determination Spectrophotometric Method	TS EN ISO 7393-2
Waste water	Determination of Bound Chlorine Spectrophotometric Method	TS EN ISO 7393-2
Waste Water	Determination of Phenol Pre Treatment: Distillation Method Measurement: Spectrophotometric Method	SM 5530 B SM 5530 D
Waste Water	Sulphide Determination Spectrophotometric Method	SM 4500-S ₂ ⁻ D
Waste Water	Sulphide Determination Titrimetric Method	SM 4500-S ₂ ⁻ F
Waste Water	Total Phosphorus Determination Preliminary Process: Extracting Method Measurement: Spectrophotometric Method	SM 4500-P B SM 4500-P D
Waste Water	Determination of phosphate / phosphate Phosphorus Spectrophotometric Method	SM 4500-P D
Waste Water	Determination of Hydrazine Spectrophotometric Method	ASTM D1385
Waste Water	Determination of hydrocarbons Pre-process: Sokslet Extraction Method Measurement: Gravimetric Method	SM 5520 D and F
Waste Water	Determination of Vanadium (V) Pre-Treatment: Extraction with Nitric Acid Pre-Treatment: Microwave Assisted Extraction Method Measurement: AAS-Graphite Furnace Spectrometer Method	SM 3030 K SM 3030 E ASTM D3373


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	<p>Testing Laboratory</p>	
	<p>Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye</p>	<p>Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/</p>
Waste Water	Hardness Determination EDTA Titrimetric Method	SM 2340 C
Waste Water	Calcium (Ca) Determination EDTA Titrimetric Method	SM 3500-Ca B
Waste Water	Magnesium (Mg) Determination Calculation Method	SM 3500-Mg B
Waste water	Determination of Permanganate Index Titrimetric Method	TS 6288 EN ISO 8467
Waste Water	Determination of Polyaromatic Hydrocarbons (PAH) Naphthalene, Asenaphthylene, Asenaften, Florence, Phenanthrene, Anthracene, Pyrene, Florentine, Benzo(a) anthracene, Krisen, Benzo(a) pyrene, Benzo(k) fluoranthene, Benzo(b) fluoranthene, Inden (1,2,3-c, d) pyrene, Dibenzo (a, h) anthracene, Benzo (g, h, i) perylene, Benzo(e)pyrene, Perylene Pre-Treatment: Liquid-Liquid Extraction Measurement:GC-MS Method	EPA 3510 C EPA 3630 C EPA 8270 E
Waste Water	Surface Active Article(MBAS) Determination Pre-Process: Sorting with Sublation Apparatus Measurement: Spectrophotometric Method	SM 5540 B SM 5540 C
Waste Water	Bor(B) Determination Spectrophotometric Method	TS 3661
Waste water	Determination of Chlorophyll-a Spectrophotometric Method	SM 10200 H
Waste water	Determination of Chlorophyll-a Spectrophotometric Method	TS 9092 ISO 10260
Waste oil	Petroleum Liquids-Hand Sampling	TS 900-1 EN ISO 3170
Waste oil	Sampling for Insulating Fluids	TS EN 60475
Waste oil	Determination of Arsenic (As), Cadmium (Cd), Chromium (Cr), Lead (Pb), Phosphorus (P) Pre Treatment: Acidic Extraction by Microwave Measurement: AAS- Graphite Furnace Method	EPA 3051 A SM 3113 B
Waste oil	Determination of Lead (Pb), Calcium(Ca), Zinc(Zn) Pre Treatment: Acidic Extraction by Microwave Measurement: AAS- Direct Air-Acetylene Flame Method	EPA 3051 A SM 3111 B
Waste oil	Flash Point Determination Closed Cap Method	ASTM D93
Waste oil	Chloride Determination Preparation: Oxygen-Calorimeter Method Measurement: Titrimetric Method	EPA 5050 EPA 9253


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 <p>HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.</p> <p>Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023</p>		
Testing Laboratory		
Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Waste oil	Chloride Determination Preparation: Oxygen-Calorimeter Method Measurement: Titrimetric Method	EPA 5050 SM 4500 Cl B SM 4500 Cl C
Sea Water	Taking samples from seawaters	TS ISO 5667-9
Sea water	Determination of Light Transmittance/Secchi Disc Depth Measurement: Disk Method	EPA 841-B-97-003
Sea Water	Determination of warmth Laboratory and Field Method	SM 2550 B
Sea Water	pH Determination Electrometric Method	SM 4500 H ⁺ B
Sea Water	Conductance Laboratory Method	SM 2510 B
Sea Water	Solid(AKM) Determination Gravimetric Method	SM 2540 D
Sea Water	Determination of dissolved oxygen Membrane Electrode Method	SM 4500-O G
Sea Water	Salinity Electrical Conductivity Method	SM 2520 B
Sea Water	Color Determination Spectrophotometric Method	SM 2120 C
Sea Water	Color Determination Spectrophotometric Method	TS EN ISO 7887 B
Sea Water	Determination of Nitrite/Nitrite Nitrogen Spectrophotometric Method	SM 4500-NO ₂ ⁻ B
Sea Water	Determination of Nitrate/Nitrate Nitrogen Determination Spectrophotometric Method	SM 4500-NO ₃ ⁻ E
Sea Water	Ammonium / Ammonium Nitrogen Determination Pre-process: Distillation Method Measurement: Spectrophotometric Method	SM 4500-NH ₃ B SM 4500-NH ₃ F

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 Test TS EN ISO/IEC 17025 AB-0095-T	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
Testing Laboratory		
Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Sea Water	Total Phosphorus Determination Preliminary Process: Extracting Method Measurement: Spectrophotometric Method	SM 4500-P B SM 4500-P E
Sea Water	Determination of phosphate / phosphate Phosphorus Spectrophotometric Method	SM 4500 P E
Sea Water	Blur Determination Nephelometric Method	SM 2130 B
Sea Water	Determination of Oil and Grease Pre-process: Sokslet Extraction Method Measurement: Gravimetric Method	SM 5520 D
Sea Water	Chrome(VI) Determination Spectrophotometric Method	SM 3500-Cr B
Sea Water	Total Kjeldahl Nitroo(TKN) Determination Macro Kjeldahl Method	SM 4500-N _{org} B
Sea water	Determination of Nitrate/Nitrate Nitrogen Spectrophotometric Method	SM 4500-NO ₃ B
Sea Water	Determination of Chlorophyll-a Spectrophotometric Method	TS 9092 ISO 10260
Sea Water	Determination of Chlorophyll-a Spectrophotometric Method	SM 10200 H
Sea Water	Toxicity / Fish Biodeen(ZSF) Determination & nbsp;	In-house method TA.177 Rev.06 (Sampling and Analysis Methods of WPCR Appendix-1 and TS 5676 have been modified.)

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 <p>HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.</p> <p>Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023</p>		
Testing Laboratory		
Address : ALİ KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Sea Water	Determination of Cadmium (Cd), Copper (Cu), Lead (Pb), Nickel (Ni) Pre Treatment: Method for Metals Analysis: AAS - Graphite Furnace Method	In-House Method "TA.321 Rev.00" (Seawater Analysis Third Extended Willey-VHC Klaus Grasshoff:2009) SM 3113 B
Sea Water	Determination of Zinc (Zn) Pre Treatment: Method for Metals Analysis: AAS- Direct Air-Acetylene Flame Method	In-House Method "TA.321 Rev.00" (Seawater Analysis Third Extended Willey-VHC Klaus Grasshoff:2009) SM 3111 B
Sea Water	Determination of Phenol Pre Treatment: Distillation Method Measurement: Spectrophotometric Method	SM 5530 B SM 5530 C
Sea Water	Fluoride Determination Pre-process: Distillation Method Measurement: SPADNS Method	SM 4500-F B SM 4500-F D
Sea Water	Chloride Determination Titrimetric Method	SM 4500 Cl-B
Sea Water	Chloride Determination Titrimetric Method	SM 4500 Cl-C
Sea Water	Determination of Total Chlorine Spectrophotometric Method	SM 4500 Cl' G
Sea Water	Needs of chemical oxygen(KOI) Determination Open Reflaks-Titrimetric Method	TS 2789-Annex A TS 2789-Annex B
Sea Water	Determination of degradable organic pollutants 5-Daily BOİ Test Method	SM 5210 B
Sea Water	Sulphide Determination Spectrophotometric Method	SM 4500-S ²⁻ D

 Test TS EN ISO/IEC 17025 AB-0095-T	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
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Testing Laboratory		
Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Sea Water	Sulphide Determination Titrimetric Method	SM 4500-S2- F
Sea Water	Sulphate Determination Gravimetric Method	SM 4500 SO ₄ ²⁻ C
Sea Water	Sulphate Determination Spectrophotometric Method	SM 4500 SO ₄ ²⁻ E
Sea Water	Total Determination of Cyanide Pre-process: Distillation Method Measurement: Titrimetric Method	SM 4500-CN C SM 4500-CN D
Sea Water	Total Determination of Cyanide Pre-process: Distillation Method Measurement: Spectrophotometric Method	SM 4500-CN C SM 4500-CN E
Sea Water	Surface Active Article(MBAS) Determination Pre-Process: Sorting with Sublation Apparatus Measurement: Spectrophotometric Method	SM 5540 B SM 5540 C
Sea Water	PAH(Polyaromatic Hydrocarbons) Determination (The compound names requested in this scope shall be written on.) Pre-process: Liquid Liquid /Solid Phase Extraction Pre-process: Alumina Cleaning Pre-Procurement: Silicagel Cleaning Measurement: GC-MS Method	EPA 3510 C EPA 3630 C EPA 8270 E
Sewage Sludge	Getting Sludge Samples from Sewerage and Water Treatment Facilities	TS EN ISO 5667-13

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 TÜRKAK  <small>Test TS EN ISO/IEC 17025 AB-0095-T</small>	HALİÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
	Testing Laboratory	
	Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye	Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Sewage Sludge	Determination of Arsenic (As), Beryllium (Be), Molybdenum (Mo), Selenium (Se), Thallium (Tl), Lead (Pb), Cadmium (Cd), Nickel (Ni), Antimony (Sb), Copper (Cu), Barium (Ba), Chromium (Cr) Pretreatment: Acidic Extraction by Microwave Measurement: AAS - Graphite Furnace Method	EPA 3051 A SM 3113 B
Sewage Sludge	Determination of Silver (Ag), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Copper (Cu), Nickel (Ni), Lead (Pb), Tin (Sn), Zinc (Zn), Antimony (Sb) Pretreatment: Acidic Extraction by Microwave Measurement: AAS- Direct Air-Acetylene Flame Method	EPA 3051 A SM 3111 B
Sewage Sludge	Determination of Barium (Ba) Pretreatment: Acidic Extraction by Microwave Measurement: AAS- Direct Nitrous Oxide Acetylene Flame Method	EPA 3051 A SM 3111 D
Sewage Sludge	Determination of Mercury (Hg) Pretreatment: Acidic Extraction by Microwave Measurement: AAS- Cold Vapor Atomic Absorption	EPA 3051 A SM 3112 B
Sewage Sludge	Vanadium (V) Determination Preparation: Microwave Acidic Extraction Measurement: AAS-Gravit Oven Method	EPA 3051 A ASTM D 3373
Sewage Sludge	Determination of the Loss on Ignition of Dry Mass Gravimetric Method	TS EN 12879
Sewage Sludge	pH Determination Electrometric Method	TS ISO 10390
Sewage Sludge	Dry Residue (%) and Water Content (%) Determination Gravimetric Method	TS 9546 EN 12880
Sewage Sludge	Electrical Conductivity Determination Electrometric method	TS ISO 11265
Sewage Sludge	Determination of Organic Matter Titrimetric Method	TS 8336
Sewage Sludge	Total Nitrogen Determination Modified Kjeldahl Method	TS 8337 ISO 11261
Sewage Sludge	Kjeldahl Nitrogen (TKN) Determination Kjeldahl Nitrogen Method	TS EN 13342
Sewage Sludge	Phosphorus Determination Modified Bray and Kurtz Method	TS 8338
Sewage Sludge	Determination of Soil Structure Determination of Water Saturation	TS 8333
Sewage Sludge	PCB (Polychlorinated Biphenyls) Determination (The compound names requested in this scope will be written on.) Preparation: Soxhlet/PLE(FMS/ASE) Extraction Preparation: Silicagel Cleaning Preparation: Alumina Cleaning Preparation: Fluorocyl Cleaning Preparation: H ₂ SO ₄ /sub>/NaOH Cleaning Preparation: Sulfur Cleaning Measurement: GC-ECD / GC-MS Method	ISO 13876
Waste	Sampling from solid waste	TS 12090


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 Test TS EN ISO/IEC 17025 AB-0095-T	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
Testing Laboratory		
Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Waste	Determination of Arsenic (As), Beryllium (Be), Molybdenum (Mo), Selenium (Se), Thallium (Tl), Lead (Pb), Cadmium (Cd), Nickel (Ni), Antimony (Sb), Copper (Cu), Barium (Ba), Chromium (Cr) Pretreatment: Microwave Assisted Digestion of Leachate Measurement: AAS - Graphite Furnace Method	TS EN 12457-4 EPA 3051A SM 3113 B
Waste	Determination of Silver (Ag), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Copper (Cu), Nickel (Ni), Lead (Pb), Tin (Sn), Zinc (Zn), Antimony (Sb) Pretreatment: Microwave Assisted Digestion of Leachate Measurement: AAS- Direct Air-Acetylene Flame Method	TS EN 12457-4 EPA 3051A SM 3111 B
Waste	Determination of Barium (Ba) Pretreatment: Microwave Assisted Digestion of Leachate Measurement: AAS- Direct Nitrous OxideAcetylene Flame Method	TS EN 12457-4 EPA 3051A SM 3111 D
Waste	Mercury (Hg) Determination Preparation: Solid Extract Method Preparation: Cold Evaporation Measurement: AAS-Cold Steam Method	TS EN 12457-4 SM 3112 B
Waste	Chloride Determination Preparation: Solid Extract Method Measurement: Titrimetric Method	TS EN 12457-4 SM 4500-Cl ⁻ B
Waste	Chloride Determination Preparation: Solid Extract Method Measurement: Titrimetric Method	TS EN 12457-4 SM 4500-Cl ⁻ C
Waste	Fluoride Determination Preparation: Solid Extract Method Preparation: Distillation Method Measurement: SPADNS Method	TS EN 12457-4 SM 4500-F B SM 4500-F D
Waste	Sulphate Determination Preparation: Solid Extract Method Measurement: Gravimetric Method	TS EN 12457-4 SM 4500 SO ₄ ²⁻ C
Waste	Sulphate Determination Preparation: Solid Extract Method Measurement: Gravimetric Method	TS EN 12457-4 SM 4500 SO ₄ ²⁻ D
Waste	Sulphate Determination Preparation: Solid Extract Method Measurement: Turbidimetric Method	TS EN 12457-4 SM 4500-SO ₄ ²⁻ E
Waste	Determination of Bromide, Fluoride, Chloride, Nitrite/Nitrite Nitrogen, Nitrate/Nitrate Nitrogen, Orthophosphate, Phosphate/Phosphate Phosphorus, Sulfate Pretreatment: Solid Extraction Method Measurement: Ion Chromatography (IC)	TS EN 12457-4 SM 4110 B
Waste	Total Dissolved Substance Preparation: Solid Extract Method Measurement: Gravimetric Method	TS EN 12457-4 SM 2540 C
Waste	Determination of Vanadium (V) Pre Treatment: Microwave Assisted Digestion of Leachate Measurement: AAS- Graphite Furnace Method	TS EN 12457-4 EPA 3051 A ASTM D 3373
Waste	Determination of Loss on Ignition of Dry Mass Gravimetric Method	TS EN 12879
Waste	pH Determination Electrometric Method	TS ISO 10390
Waste	Dry Residue (%)Water Content (%) Determination Gravimetric Method	TS 9546 EN 12880


Accreditation Scope

 Test TS EN ISO/IEC 17025 AB-0095-T	HALİÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
	Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
Testing Laboratory		
Address : ALI KUŞÇU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye		Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/
Waste	Electrical Conductivity Determination Electrometric Method	TS ISO 11265
Waste	Determination of Organic Matter Titrimetric Method	TS 8336
Waste	Determination of Phenol Index Preparation: Solid Extract Method Preparation: Distillation Method Measurement: Spectrophotometric Method	TS EN 12457-4 TS 6227 ISO 6439
Waste	Determination of Polychlorinated Biphenyls (PCBs) (PCB28, PCB52, PCB101, PCB118, PCB138, PCB153 and PCB180) Pre-Process: Soxlet Extraction Method Pre-Treatment: Silicagel Cleanup Measurement: GC-MS Method	ISO 13876 TS EN 17322
Soil	Surface Soil Sampling, Transport and Storage of Samples	TS 9923
Soil	Determination of Arsenic (As), Beryllium (Be), Molybdenum (Mo), Selenium (Se), Thallium (Tl), Lead (Pb), Cadmium (Cd), Nickel (Ni), Antimony (Sb), Copper (Cu), Barium (Ba), Chromium (Cr) Pretreatment: Microwave Assisted Extraction Measurement: AAS - Graphite Furnace Method	EPA 3051 A SM 3113 B
Soil	Determination of Silver (Ag), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Copper (Cu), Nickel (Ni), Lead (Pb), Tin (Sn), Zinc (Zn), Antimony (Sb) Pretreatment: Microwave Assisted Extraction Measurement: AAS- Direct Air Acetylene Flame Method	EPA 3051 A SM 3111 B
Soil	Determination of Barium (Ba) and Titanium (Ti) Pretreatment: Microwave Assisted Extraction Measurement: AAS- Direct Nitrous Oxide Acetylene Flame Method	EPA 3051 A SM 3111 D
Soil	Determination of Mercury (Hg) Pretreatment: Microwave Assisted Extraction Measurement: AAS- Cold Vapor Atomic Absorption	EPA 3051 A SM 3112 B
Soil	Vanadium (V) Determination Preparation: Microwave Acidic Extraction Measurement: AAS-Graphite Furnace Method	EPA 3051 A ASTM D 3373
Soil	Determination of Loss on Ignition (550 ± 25) ^o C Gravimetric Method	TS EN 12879
Soil	pH Determination Electrometric Method	TS ISO 10390
Soil	Dry Residue (%) Water Content (%) Determination Gravimetric Method	TS 9546 EN 12880
Soil	Determination of Organic Matter Titrimetric Method	TS 8336
Soil	Determination of Total Salts	TS 8334


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 Test TS EN ISO/IEC 17025 AB-0095-T	HALİÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ. Accreditation Nr: AB-0095-T Revision Nr: 23 Date: 14.04.2023	
	Testing Laboratory Address : ALI KUŞCU MAH. YAVUZ SELİM CAD. HALIÇ ÇEVRE LABORATUVARI NO:50/1 FATİH İstanbul / Türkiye Phone : +90 212 621 2340 Fax : Email : info@haliccevre.com Website : https://haliccevre.com/	
Soil	Chromium (VI) Determination Preparation: Alkaline Extracting Method Measurement: Spectrophotometric Method	EPA 3060 A EPA 7196 A
Soil	Phosphorus Determination Modified Bray and Kurtz Method	TS 8338
Soil	Determination of Total Cyanide Pre Treatment: Extraction+Distillation Measurement: Titrimetric+Spectrometric Method	EPA 9013 A EPA 9010 C EPA 9014
Soil	Determination of Total Cyanide Pre Treatment: Distillation Measurement: Spectrophotometric Method	SM 4500-CN B SM 4500-CN C SM 4500-CN E
Soil	Determination of Cyanide Spectrophotometric Method	ISO 11262
Soil	Oil-Grease Determination Preparation: Soxhlet Extraction Measurement: Gravimetric Method	SM 5520 E
Soil	Total Nitrogen Determination Modified Kjeldahl Method	TS 8337 ISO 11261
Soil	Determination of Soil Structure Determination of Water Saturation	TS 8333
Soil	PCB (Polychlorinated Biphenyls) Determination (The compound names requested in this scope will be written on.) Preparation: Soxhlet/PLE (FMS/ASE) Extraction Preparation: Silicagel Cleaning Preparation: Alumina Cleaning Preparation: Fluoricyl Cleaning Preparation: H ₂ SO ₄ /NaOH Cleaning Preparation: Sulfur Cleaning Measurement: GC-ECD/GC-MS Method	ISO 13876
Sediment	Samples from Bottom Sediments	TS 9547 ISO 5667-12
Marine Sediments	Sampling from Marine Sediments	TS EN ISO 5667-19
Sediment	Determination of Dry Residue(%) and Water Content(%) Gravimetric Method	TS 9546 EN 12880
Sediment	Combustion Loss Determination(550 ± 25) ° C Gravimetric Method	TS EN 12879
Sediment	Electrical Conductivity Determination Electrometric Method	TS ISO 11265
Sediment	pH Determination Electrometric Method	TS ISO 10390
Sediment	Phosphorus Determination Modified Bray and Kurtz Method	TS 8338

Accreditation Scope

 Test TS EN ISO/IEC 17025 AB-0095-T	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
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Sediment	Determination of Cadmium (Cd), Chromium (Cr), Lead (Pb), Copper (Cu), Nickel (Ni), Zinc (Zn), Iron (Fe), Tin (Sn) Pretreatment: Acidic Extraction by Microwave Measurement: AAS- Flame Method	EPA 3051 A SM 3111 B
Sediment	Determination of Barium (Ba), Beryllium (Be), Aluminum (Al) Pretreatment: Acidic Extraction by Microwave Measurement: AAS- Flame Method	EPA 3051 A SM 3111 D
Sediment	Determination of Cadmium (Cd), Lead (Pb), Copper (Cu), Nickel (Ni), Tin (Sn), Aluminum (Al), Vanadium (V), Barium (Ba), Beryllium (Be), Cobalt (Co), Arsenic (As) Pretreatment: Acidic Extraction by Microwave Measurement: AAS - Graphite Furnace Method	EPA 3051 A SM 3113 B
Sediment	Determination of Mercury (Hg) Pretreatment: Acidic Extraction by Microwave Measurement: AAS- Cold Vapor Atomic Absorption	EPA 3051 A SM 3112 B
Sediment	PCB(Polyclore Bipeniller) Determination (The compound names requested in this scope shall be written on.) Pre-process: Sokslet / PLE Extraction Pre-Procurement: Silicagel Cleaning Pre-process: Alumina Cleaning Pre-process: Fluoricyl Cleaning Pre-process: H2SO4 / NaOH Cleaning Pre-process: Sulfur Cleaning Measurement: GC-ECD / GC-MS Method	ISO 13876
Biota	Sampling of Benthic Macroinvertebrates in Fresh Waters	TS EN ISO 10870
Biota	Determination of Dry Residue(%) and Water Content(%) Gravimetric Method	TS 9546 EN 12880
Biota	Determination of the Loss on Ignition of Dry Mass Gravimetric Method	TS EN 12879

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 Test TS EN ISO/IEC 17025 AB-0095-T	HALIÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.	
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Biota	Determination of Cadmium (Cd), Chromium (Cr), Lead (Pb), Copper (Cu), Nickel (Ni), Zinc (Zn), Iron (Fe), Tin (Sn) Pretreatment: Acidic Extraction by Microwave Measurement: AAS- Flame Method	EPA 3051 A SM 3111 B
Biota	Determination of Barium (Ba), Beryllium (Be), Aluminum (Al) Pretreatment: Acidic Extraction by Microwave Measurement: AAS- Flame Method	EPA 3051 A SM 3111 D
Biota	Determination of Cadmium (Cd), Lead (Pb), Copper (Cu), Nickel (Ni), Tin (Sn), Aluminum (Al), Vanadium (V), Barium (Ba), Beryllium (Be), Cobalt (Co) Pretreatment: Acidic Extraction by Microwave Measurement: AAS - Graphite Furnace Method	EPA 3051 A SM 3113 B
Biota	Determination of Phenol Index Pre-Treatment: Acidic extraction by microwave Measurement: Spectrometric Method	EPA 3051 A SM 3112 B
*Customer's on-site, temporary or mobile facility		

This document has been signed by Gülden Banu Müderrisoğlu on {1} with a secure electronic signature in accordance with the electronic signature law numbered 5070. Use the QR code to verify the e-signed document.




HALİÇ ÇEVRE TEKNOLOJİLERİ MÜHENDİSLİK MÜŞAVİRLİK TURİZM VE SAĞLIK HİZMETLERİ TİCARET PAZ.LTD.ŞTİ.

Accreditation Nr: AB-0095-T
Revision Nr: 23 Date: 14.04.2023

Occupational Hygiene Analyses


Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Occupational Hygiene Gas Analysis with Detector Tube	Determination of Concentration of Toxic Gases or Vapors Diisopropylamine (C ₆ H ₁₅ N), N,N-Dimethylaniline (C ₈ H ₁₁ N), Dipropylamine (C ₆ H ₁₅ N), n- Methylaniline (C ₇ H ₉ N), Morpholine (C ₄ H ₉ NO), Pentylamine (C ₅ H ₁₃ N), Propylamine (C ₃ H ₉ N), Pridine (C ₅ H ₅ N), o-Toluidine (C ₇ H ₉ N), p-Toluidine (C ₇ H ₉ N), Isopropylacetate (C ₅ H ₁₀ O ₂), tert-Butanol (C ₄ H ₁₀ O), Butyl ether (C ₈ H ₁₈ O), Butyl methacrylate (C ₈ H ₁₄ O ₂), tert-Butyl methyl ether (C ₅ H ₁₂ O), Cumene (C ₉ H ₁₂), Cyclohexane (C ₆ H ₁₂), Decahydronaphthalene (C ₁₀ H ₁₈), n-Decane (C ₁₀ H ₂₂), Diethylbenzene (C ₁₀ H ₁₄), Ethylmethacrylate (C ₆ H ₁₀ O ₂), Isopropyl ether (C ₆ H ₁₄ O), n-Nonane (C ₉ H ₂₀), 1,2,4-Trimethylbenzene (C ₉ H ₁₂), p-Dichlorobenzene (C ₆ H ₄ Cl ₂), Undecane (C ₁₁ H ₂₄), Acrylonitrile (C ₃ H ₃ N), Acetaldehyde (C ₂ H ₄ O), Tetrachlorethylene (C ₂ Cl ₄), Carbondisulfide (CS ₂), Mercury vapor (Hg), Naphthalene (C ₁₀ H ₈) Bromochloromethane (CH ₂ BrCl), Bromoform (CHBr ₃), 1-Bromopropane (C ₃ H ₇ Br), 2-Bromopropane (C ₃ H ₇ Br), Dibromomethane (CH ₂ Br ₂), 1,2-Dichloropropane (C ₃ H ₆ Cl ₂), Ethyl bromide (C ₂ H ₅ Br), General hydrocarbons, Methyl isothiocyanate (C ₂ H ₃ NS), Ethylbenzene (C ₈ H ₁₀), Ethylene (C ₂ H ₄), Acetone (C ₃ H ₆ O), Methyl ethyl ketone (C ₄ H ₈ O), Ethylacetate (C ₄ H ₈ O ₂), Butylacetate (C ₆ H ₁₂ O ₂), Ethylene oxide (C ₂ H ₄ O), Propylene glycol (C ₃ H ₈ O ₂), Propylene oxide (C ₃ H ₆ O), Kerosin, Heptane (C ₇ H ₁₆), Methylmercaptan (CH ₄ S), Methylalcohol (CH ₄ O), 1-Butanol (C ₄ H ₁₀ O), Methyl isobutyl ketone (C ₆ H ₁₂ O), 2-Ethoxyethanol (C ₄ H ₁₀ O ₂), Tetrahydrofuran (C ₄ H ₈ O), 1,1,1-Trichloroethane (C ₂ H ₃ Cl ₃), Arsine (AsH ₃), Isopropylalcohol (C ₃ H ₈ O), Phenol (C ₆ H ₆ O), Cresol (C ₇ H ₈ O), Aniline (C ₆ H ₅ NH ₂), Ethylamine (C ₂ H ₇ N), Inorganic gas determinant, Amins, Nitrogen dioxide (NO ₂), Phosphine (PH ₃), Nitric acid (HNO ₃), Hydrogen Bromide (HBr), Nitrogen oxides (NO _x), Butane (C ₄ H ₁₀), Hydrogen (H ₂), Vinyl chloride (CH ₂ CHCl), Ethylene glycol (C ₂ H ₆ O ₂), Pentyl acetate (C ₇ H ₁₄ O ₂), Styrene (C ₈ H ₈), Divinyl benzene (C ₆ H ₄), α-Pinene (C ₁₀ H ₁₆), Hydrogen cyanide (HCN), Phosgene (COCl ₂), Acetylene (C ₂ H ₂), Hydrogen peroxide (H ₂ O ₂), Oxygen (O ₂), Chlorine (Cl ₂), Tetrachloroethylene (C ₂ Cl ₄), Acetaldehyde (C ₂ H ₄ O), Methylmetacrylate (C ₅ H ₈ O ₂), Buthyl amine (C ₄ H ₁₁ N), Cyclohexyl amine (C ₆ H ₁₃ N), Dibutylamine (C ₈ H ₁₉ N), Oil Mist), (Sulfur dioxide (SO ₂), Ammonia (NH ₃), Carbon monoxide (CO), Hydrogen sulfide (H ₂ S), Propane (C ₃ H ₈), Carbon dioxide (CO ₂), Hydrogen fluoride (HF), Formaldehyde (CH ₂ O), Hydrogen chloride (HCl), Ozone (O ₃), Sulfuric acid (H ₂ SO ₄), Asetic acid (CH ₃ COOH), Formic acid (HCOOH), Asetic anhidryde (C ₄ H ₆ O ₃), Acrylic acid (C ₃ H ₄ O ₂), Butyric acid (C ₄ H ₈ O ₂), Isobutyric acid (C ₄ H ₈ O ₂), Isovaleric acid (C ₅ H ₁₀ O ₂), Maleic anhydride (C ₄ H ₂ O ₃), Methacrylic acid (C ₄ H ₆ O ₂), Allyl alcohol (C ₃ H ₆ O), Propionic acid (C ₃ H ₆ O ₂), n-Valeric acid (C ₅ H ₁₀ O ₂), Organic gas determiner, Pentane (C ₅ H ₁₂), Hexzane (C ₆ H ₁₄), Trichlorethylene (C ₂ HCl ₃), Tetrachlorethylene (C ₂ Cl ₄), Butadiene (C ₄ H ₆), Gasoline, Benzene (C ₆ H ₆), Toluene (C ₇ H ₈), Xylene (C ₈ H ₁₀), Carbon tetra chloride (CCl ₄), Dimethylformamide (C ₃ H ₇ NO), Methyl acrylate (C ₄ H ₆ O ₂), Butyl acrylate (C ₇ H ₁₂ O ₂), Ethyl acrylate (C ₅ H ₈ O ₂) (Chlorine Dioxide (ClO ₂), Chlorine (Cl ₂) Sampling and Measurement: Instant Measurement with a Detector Tube Sampling and Measurement: Long Term with Dosimeter Tube Passive Measurement	ASTM D4490-96
Occupational Hygiene Gas Analysis with Device	Determination of Oxygen (O ₂), Carbonmonoxide (CO), Hydrogen sulfide (H ₂ S), Methane (CH ₄ , %LEL), Carbon dioxide (CO ₂), Sulfur dioxide (SO ₂), Nitrogen dioxide (NO ₂) Sampling and Measurement: Electrochemical Cell Method	In-House Method- "TA.266.01/Rev.00" (NIOSH-NMAM 6604:2016, NIOSH- NMAM 6601:1994)
Occupational Hygiene Gas Analysis with Device	Determination of Carbon Monoxide (CO) Sampling and Analysis: Electrochemical Cell Method	NIOSH NMAM 6604
Occupational Hygiene Gas Analysis with Device	Determination of Oxygen (O ₂) Sampling and Analysis: Electrochemical Cell Method	NIOSH NMAM 6601
Occupational Hygiene Volatile Organic Compounds	Determination of Volatile Organic Compounds 1,4-Dioxane (Diethylene ether), Acetic Acid (Ethanoic Acid) (Hydrogen Acetate), Diethylamine, Methanol (Methyl alcohol), Pyridine (Azabenzol) (Azin), Triethylamine Sampling: Pumping Sorbent Tube Sampling Pre-Treatment: Solvent Desorption Analysis: GC-FID Method	TS ISO 16200-1

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<p>Occupational Hygiene Volatile Organic Compounds</p>	<p>Determination of Volatile Organic Compounds</p> <p>1,1,1,2-tetrachloroethane, 1,1,1-Trichloroethane (Methyl Chloroform), 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane (Vinilidene Chloride) (Vinylidene Dichloride), 1,1-dichloropropene, 1,2,3-Trichloropropane (Trichlorhydrin), (Allyl Trichloride), 1,2,3-Trimethylbenzene (Hemellitil), 1,2,3-Trichlorobenzene, 1,2-Dibromoethane (Glycolbromide), (Ethylenebromide), (Ethylenedibromide), 1,2-Dichlorobenzene (o-dichlorobenzene), 1,2-Dichloroethane (Ethylenedichloride), (Ethanedichloride), 1,1-Dichloroethane (1,1-Ethylidene Dichloride),(Ethylidene Chloride), (Ethylidene Dichloride) , cis-1,2-Dichloroethene (cis-acetylene dichloride), 1,2-dichloropropane (Propylene bichloride), 1,3,5-Trimethylbenzene (Mesiethylene), 1,3-dichlorobenzene (m-Dichlorobenzene), 1,3 -dichloropropane, 1,4-Dichlorobenzene (p-dichlorobenzene), 2,2-dichloropropane, 2,6-Dimethyl-4-heptanone, 4-chlorotoluene, 2-Hexanone (Propilacetone) (Butyl Methyl Ketone), 2-Methyl- 1-propanol (Isobutanol), (Isobutyl alcohol), 3-Heptanone (Ethylbutylketone) (3-oxoheptane) (Butylethylketone), 2-chlorotoluene, 4-isopropyltoluene, Acetic acid n-propyl ester, As ethic acid-isobutyl ester, Acrylic acid-ethyl ester, alpha-Methylstyrene (Isopropenylbenzene) (beta-phenyl propylene), Bromobenzene (Bromobenzole) (Phenyl Bromide), Bromochloromethane, Bromodichloromethane, Bromomethane, Chloromethane (Methylchloride), 1,2-Dichloroethane (cis-/trans), Cis-1,3-Dichloropropene, Dibromochloromethane, Dibromomethane, Dichlorodifluoromethane, Epichlorohydrin (1-Chloro-2,3-epoxypropane), Hexachlorobutadiene (hexachloro-1,3,-butadiene) (Trypene) (Perchlorobutadiene), Hexachloroethane (Carbon hexachloride) (Ethane hexachloride) (Perchloroethane), Isopropylbenzene (Cumene) (Cumol), Methyl acetate (Methyl ethanoate) (Methyl ester of acetic acid), Naphthalene, n-Butylbenzene (1-phenylbutane) (1- butylbenzene), sec-Butylbenzene (1-methylpropylbenzene), Tert-butylbenzene (1,1-dimethylethylbenzene), Tetrachloroethene (Perchloroethylene (Perchloroethene), Tetrachloromethane (Carbon Tetrachloride) (Carbon Chloride) (Benziform) (Perchloromethane), Trans-1, 3-dichloropropene, Tribromomethane (Bromoform) (Methyl tribromide), Trichlorofluoromethane (Fluorochloroform), Vinylchloride (K chloroethylene), 2,3-Dimethylheptane, 2,3Dimethylpentane, 1,3-Butadiene (Biethylene) (Divinyl) (Vinylethylene) (Bivinyl) (Butadiene), 1,2-Dibromo-3-chloropropane (Dibromochloropropane)</p> <p>Sampling: Pumping Sorbent Tube Sampling Pre-Treatment: Solvent Desorption Analysis: GC-MS Method</p>	<p>TS ISO 16200-1</p>
<p>Occupational Hygiene Volatile Organic Compounds</p>	<p>Determination of Volatile Organic Compounds</p> <p>1,1,2-Trichloroethane, 1,2,4-Trimethylbenzene, 1-Butanol (Butanol) (n-Butyl alcohol) (Butylhydrate Butyric alcohol) (Propylcarbinol)), 1-propanol, 2-Butanone (Butanone) (Ethyl methyl ketone), 2-Heptanone (Heptan-2-Open), 2-Propanol (Isopropyl alcohol) (IPA) (Isopropanol) (Sec-Propanol), 4-Methyl-2-pentanone (Isobutylmethylketone) (MIK) (MIBK) (2-Pentanone) (Hexon), 5-Methyl-3-heptanone, Acetone (Dimethyl Ketone) (Dimethyl Carbonyl) (Propanone) (Dimethyl Formaldehyde), Acetonitrile (Ethanenitrile) (Methyl Cyanide), Aniline (Phenylamine) (Aminobenzene) (Benzamine), Acetylacetone, Benzene, Butylglycol (2-Butoxyethanol) (Ethylene glycol monobutylether) (EGBE), Chloroform (Trichloromethane), Cyclohexanone, Dichloromethane (Methylenechloride), Diethylether (Ethoxy ethane) (Ethyl ether) (Ethyl oxide), Ethanol (Ethyl alcohol), Ethyl Acetate (Ethylethanolate) (Ethyl Ester) (Acetic Ester), Ethylbenzene, Ethyleneglycol monomethylether (2-Methoxyethanol), n-Hexane, Isopropylacetate (2-Propyl acetate), Methylcyclohexane (Hexahydrotoluene) (Cyclohexylmethane), mp-xylene, n-Butyl acetate, n-Heptane, n-benzene, Octane, o-Xylene, Phenol (Carbolic acid) (Hydroxybenzene), Cyclohexane (Hexahydrobenzene) (Hexamethylene), Styrene (Vinylbenzene) (Phenylethylene), tert-butylmethyl ether (Tertiarybutylmethylketone) (MTBE), Tetrahydrofuran (1,4-Epoxybutane) (Butylene oxide)) (Hydrofuran) (Furanidine), Toluene, Vinylacetate (Acetic Acid Vinyl Ester), 2-Pentanone (4-M) ethylpentan-2-one)(Isobutylmethylketone) (MIK) (MIBK) (Hexon), Trichloroethylene, Chlorobenzene, Trichlorobenzene (1,2,4 Trichlorobenzene), 1,2-Dichloroethane, 1-Methoxy-2-propanol</p> <p>Sampling: Pumping Sorbent Tube Sampling Pre-Treatment: Solvent Desorption Analysis: GC-MS/GC-FID Method</p>	<p>TS ISO 16200-1</p>
<p>Occupational Hygiene Heavy Metals</p>	<p>Determination of heavy metals and compounds (Gold (Au), Silver (Ag), Aluminum (Al), Barium (Ba), Beryllium (Be), Calcium (Ca), Chromium (Cr),Cobalt (Co), Copper (Cu), Iron (Fe), Magnesium (Mg), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Selenium (Se), Tin (Sn), Thallium (Tl), Zinc (Zn), Cadmium (Cd), Sodium (Na), Titanium (Ti), Potassium (K))</p> <p>Sampling: Sampling on filter by the pump Analysis: Flame Atomic Absorption Spectroscopy (AAS)</p>	<p>In-House Method- "TA.268.Rev.05" (ASTM D 4185)</p>
<p>Occupational Hygiene Heavy Metals</p>	<p>Determination of Mercury (Hg)</p> <p>Sampling: Sampling on sorbent tube by the pump Analysis: Cold Vapor Atomic Absorption Spectroscopy (AAS)</p>	<p>NIOSH NMAM 6009</p>
<p>Occupational Hygiene Heavy Metals</p>	<p>Determination of Heavy Metal and Compounds Vanadium (V)</p> <p>Sampling: Sampling on filter by the pump Analysis: Graphite Furnace Atomic Absorption Spectroscopy (AAS)</p>	<p>In-House Method- "TA.242.Rev.04" (ASTM D 4185:2017- ASTM D 3373:2017)</p>

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Occupational Hygiene Heavy Metals	Determination of Arsenic Trioxide (As ₂ O ₃) as Elemental Arsenic Sampling: Sampling into Filter with Pump Pretreatment: Incineration with Acid in Hotplate Analysis: Graphite Furnace Atomic Absorption Spectrophotometer	NIOSH NMAM 7901
Occupational Hygiene Heavy Metals	Determination of Heavy Metal Lead (Pb) Sampling: Sampling on filter by the pump Analysis: Flame Atomic Absorption Spectroscopy (AAS)	NIOSH NMAM 7082
Occupational Hygiene Heavy Metals	Determination of Hexavalent Chromium (Cr ⁶⁺) Sampling: Sampling into Filter with Pump Pretreatment: Acidic Extraction Pretreatment: Degassing by Nitrogen and Basic Extraction Analysis: Visible Spectrophotometer	NIOSH NMAM 7600
Occupational Hygiene Heavy Metals	Determination of Heavy Metal and Compounds (Tin (Sn), Antimony (Sb), Potassium (K)) Sampling: Sampling on filter by the pump Analysis: Flame Atomic Absorption Spectroscopy (AAS)	OSHA ID-121
Occupational Hygiene Heavy Metals	Determination of Magnesium Oxide (MgO), Calcium Oxide (CaO), Titanium Dioxide (TiO ₂) Sampling: Sampling on filter by the pump Analysis: Atomic Absorption Spectroscopy (AAS)	In-House Method- "TA.304.Rev.05" (ASTM D 4185)
Occupational Hygiene Heavy Metals	Determination of Aluminum Oxide (Al ₂ O ₃) Sampling: Sampling on filter by the pump Measurement: Flame Absorption Spectrophotometer (AAS)	OSHA-ID 198SG
Occupational Hygiene Calcium Carbonate	Determination of Calcium Carbonate (CaCO ₃) Sampling: Sampling on filter by the pump Measurement: Flame Absorption Spectrophotometer (AAS)	Internal Method- "TA. 400.Rev00" (NIOSH-NMAM 7020:1994)
Occupational Hygiene Dust Analysis	Determination of Total and Respirable Dust Sampling: Sampling into Filter with Pump Analysis: Gravimetric Method	HSE-MDHS 14/3
Occupational Hygiene Dust Analysis	Determination of Respirable Dust Sampling: Sampling into Filter with Pump Analysis: Gravimetric Method	ASTM D 4532-15
Occupational Hygiene Dust Analysis	Total Dust Determination Sampling: Sampling into Filter with Pump Analysis: Gravimetric Method	NIOSH NMAM 500
Occupational Hygiene Dust Analysis	Determination of Respirable Dust Sampling: Sampling into Cyclone and Filter samples Analysis: Gravimetric Method	NIOSH NMAM 600
Occupational Hygiene Mineral Oil Aerosols	Determination of Aerosols of Metalworking Fluids Sampling: Sampling into Filter with Pump Pretreatment: Extraction Method Analysis: Gravimetric Method	NIOSH NMAM 5524
Occupational Hygiene Mineral Oil Aerosols	Determination of Mineral Oil Aerosols Sampling: Sampling into Filter with Pump Analysis: Gravimetric Method	HSE MDHS 84/2

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Occupational Hygiene Aerosol	Determination of Aerosols in Working Environment Analysis: Direct Photometric Reading	CEN / TR 16013-3
Occupational Hygiene Dust Analysis	Determination of Rubber Process Dust and Rubber Fume Sampling: Sampling into Filter with Pump Pretreatment: Soxhlet Extraction Analysis: Gravimetric Method	HSE-MDHS 47/3
Occupational Hygiene Nitrogen Oxides	Determination of Nitric Oxide (NO) and Nitrogen Dioxide (NO ₂) Sampling: Sampling into Triple Sorbent Tube with Pump Pretreatment: Solvent Desorption Analysis: Visible Absorption Spectrophotometer	NIOSH NMAM 6014
Occupational Hygiene Sulfur Dioxide	Determination of Sulfur Dioxide (SO ₂) Sampling: Sampling to the filter with the pump Pre-Treatment: Solvent Desorption Measurement: Ion Chromatography (IC)	NIOSH-NMAM 6004
Occupational Hygiene Chlorine Dioxide	Determination of Chlorine oxides (ClO ₂) Sampling: Sampling on imprecise Measurement: Ion Chromatography (IC)	OSHA-ID 202
Occupational Hygiene Hydrogen Peroxide	Determination of Hydrogen Peroxide (H ₂ O ₂) Sampling: Sampling on filter by the pump Measurement: Spectrophotometric Method	OSHA-ID 1019
Occupational Hygiene Ozone	Determination of Ozone (O ₃) Sampling: Sampling on filter by the pump Pre-Treatment: Solvent Desorption Measurement: Ion Chromatography (IC)	OSHA-ID 214
Occupational Hygiene Dust Analysis	Determination of Total Dust, Asphalt Fume and Other Benzene-Soluble Fractions Sampling: Sampling into Filter with Pump Pretreatment: Extraction and Vacuum Method Analysis: Gravimetric Method	NIOSH-NMAM 5042
Occupational Hygiene Phosphine	Determination of Phosphine (PH ₃) Sampling: Sampling into Sorbent Tube with Pump Pretreatment: Desorption of Sample with Solvent Analysis: UV Visible Spectrophotometer	NIOSH NMAM 6002
Occupational Hygiene Acetic Anhydride	Determination of Acetic Anhydride ((CH ₃ CO) ₂ CO) Sampling: Sampling into Midget Impinger with Pump Pretreatment: Extraction Method Analysis: Visible Absorption Spectrophotometer	NIOSH NMAM 3506
Occupational Hygiene Bromide, Chloride	Determination of Bromide (Br ₂) and Chloride (Cl ₂) Sampling: Sampling on filter by the pump Pre-Treatment: Solvent Desorption Measurement: Ion Chromatography (IC) with Conductivity Detector	NIOSH-NMAM 6011
Occupational Hygiene Hydrogen Sulfide	Determination of Hydrogen Sulfide Sampling: Sampling into Filter and Sorbent Tube with Pump Pretreatment: Solvent Desorption Analysis: Ion Chromatography with Conductivity Detector	NIOSH NMAM 6013



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Occupational Hygiene Inorganic Acid	Determination of Hydrofluoric Acid (HF) and Particulate Fluoride (F ⁻) Sampling: Sampling into Filter with Pump Pretreatment: Solvent Desorption Analysis: Conductivity Detector Ion Chromotography	NIOSH NMAM 7906
Occupational Hygiene Inorganic Acid	Determination of Hydrochloric Acid (HCl) Hydrobromic Acid (HBr) and Nitric Acid (HNO ₃) Sampling: Sampling into Filter with Pump Pretreatment: Solvent Desorption Analysis: Ion Chromatography with Conductivity Detector	NIOSH NMAM 7907
Occupational Hygiene Inorganic Acid	Determination of Non-Volatile Acids (Sulfuric Acid (H ₂ SO ₄) and Phosphoric Acid (H ₃ PO ₄)) Sampling: Sampling into Filter with Pump Analysis: Ion Chromatography with Conductivity Detector	NIOSH NMAM 7908
Occupational Hygiene Asbestos and Other Fibrous Dusts	Sampling Asbestos and Other Fibers	NIOSH NMAM 7400
Occupational Hygiene Thermal Comfort	Ergonomics of the Thermal Environment - Assessment of Heat Stress Using The WBGT (Wet Bulb Globe Temperature) Index	TS EN ISO 7243
Occupational Hygiene Thermal Comfort	Determination of PMV and PPD Indexes for Moderate Thermal Environments, Determination of Conditions for Thermal Comfort	TS EN ISO 7730
Occupational Hygiene Thermal Comfort	Ergonomics of the Thermal Environment - Determination and Interpretation of Cold Stress When Using Required Clothing Insulation (I _{req}) and Local Cooling Effects	TS EN ISO 11079
Occupational Hygiene Formaldehyde	Determination of Formaldehyde (CH ₂ O) Sampling: Sampling into Filter + Midget Impinger (Standard Nozzle) with Pump Pretreatment: Extraction Method Analysis: Visible Absorption Spectrophotometer	NIOSH NMAM 3500
Occupational Hygiene Ammonia	Determination of Ammonia (NH ₃) Sampling: Sampling into Sorbent Tube with Pump Pretreatment: Solvent Desorption Analysis: Visible Absorption Spectrophotometer	NIOSH NMAM 6015
Occupational Hygiene Alkaline Dusts	Determination of Total Alkaline Dusts (Sodium Hydroxide (NaOH) Potassium Hydroxide (KOH) Lithium Hydroxide (LiOH)) Sampling: Sampling into Filter with Pump Analysis: Titration Method	NIOSH NMAM 7401
Occupational Hygiene Crystalline Silica	Determination of Crystal Silica (SiO ₂) Sampling: Sampling on filter by the pump Analysis :Visible Absorption Spectrophotometer	NIOSH NMAM 7601
Occupational Hygiene Crystalline Silica	Determination of Crystal Silica (SiO ₂) Sampling: Sampling on filter by the pump Analysis: Fourier Transform Infrared Spectroscopy (FTIR)	NIOSH NMAM 7602

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Occupational Hygiene Crystalline Silica	Determination of Crystal Silica (SiO ₂) Sampling: Sampling on filter by the pump Analysis: Fourier Transform Infrared Spectroscopy (FTIR)	HSE-MDHS 101/2
Occupational Hygiene Hydrazine	Determination of Hydrazine (H ₂ NNH ₂) Sampling: Sampling into Midget Impinger with Pump Pretreatment: Extraction Method Analysis: Visible Absorption Spectrophotometer	NIOSH NMAM 3503
Occupational Hygiene Hydrogen Cyanide	Determination of Hydrogen Cyanide (HCN) Sampling: Sampling into Sorbent Tube with Pump Pretreatment: Solvent Desorption Analysis: Visible Absorption Spectrophotometer	NIOSH NMAM 6010
Occupational Hygiene Carbon Black	Determination of Carbon Black Sampling: Sampling into Filter with Pump Pretreatment: Solvent Desorption Pretreatment: Heating At Drying Oven and Muffle Furnace Analysis: Gravimetric Method	OSHA ID-196
Occupational Hygiene Magnetic Field	Basic standard on measurement and calculation procedures for human exposure to electric, magnetic and electromagnetic fields (0 Hz - 1 MHz)	TS EN 50413
Occupational Hygiene Lighting	Measurement of Lighting / Lighting Levels in The Workplaces	COHSR-928-1-IPG-039
Occupational Hygiene Noise	Measurement of Noise Exposed in Working Environment	TS EN ISO 9612
Occupational Hygiene Noise	Determination of Emission Sound Pressure Levels at a Work Station and at Other Specified Positions in an Essentially Free Field Over a Reflecting Plane with Negligible Environmental Corrections	TS EN ISO 11201
Occupational Hygiene Noise	Determination of Emission Sound Pressure Levels at a Work Station and at Other Specified Positions Applying Approximate Environmental Corrections	TS EN ISO 11202
Occupational Hygiene Noise	Determination of Emission Sound Pressure Levels at a Work Station and Other Specified Locations - Requiring Environmental Corrections Method	TS EN ISO 11204
Occupational Hygiene Noise	Determination of noise at workplace	In-House Method- "TA.275.Rev.06" (TS ISO 1996-2:2009-TS ISO 1996-2/T1:2009)
Occupational Hygiene Noise	Measuring the Level of Noise Exposure of People and Detection of Hearing Loss	TS 2607 ISO 1999
Occupational Hygiene Noise	Acoustic - Determination of Sound Pollution From Sound Sources Near The Ear - Part 1: Technique Using a Microphone in a Real Ear (Mire Technique)	TS EN ISO 11904-1
Occupational Hygiene Vibration	Measurement and Evaluation of Whole-Body Exposure to Vibration	TS ISO 2631-1 (TS EN 1032 + A1 with)

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Occupational Hygiene Vibration	Measurement and Evaluation of Human Exposure to Hand-Transmitted Vibration	TS EN ISO 5349-1 TS EN ISO 5349-2
Occupational Hygiene Vibration	Determination of Vibration Emission Value by Testing of Mobile Machinery	TS EN 1032 + A1

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Accreditation Nr: AB-0095-T
Revision Nr: 23 Date: 14.04.2023

Fluid Quantities

Measured Quantity/Calibrated Items	Range	Measurement Conditions	Expanded Measurement Uncertainty (k=2)	Remarks / Calibration Method
Volumetric Gas Flow Air Flow Measurement (Air Sampling Pump)	Flow Rate: (0.2-5) Liters/minute	Measurement Error Experiment	0.2<Q<1 0.0223 lt/min 1<Q<1.7 0.0350 lt/min 1.7<Q<2 0.00403 lt/min 2<Q<5 0.00412 lt/min	TS EN 1359; Clause 7.1.3.2 Comparative Method
Volumetric Gas Flow Air Flow Measurement (Air Sampling Pump)	Flow Rate: (5-300) Liters/minute	Measurement Error Experiment	5<Q< 10 0.291 lt/min 10<Q<16 0.898 lt/min 16<Q< 20 0.118 lt/min 20<Q<50 0.126 lt/min 50<Q<300 0.168 lt/min	TS EN 1359; Clause 7.1.3.2 Comparative Method

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Agricultural products

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Fertilizers	Determination of pH Electrometric Method	TS 836 Regulation on Market Surveillance and Control of Fertilizers Used in Agriculture, Annex-2 Method 7.4
Organic/Organomineral Fertilizers	Determination of Moisture Gravimetric Method (at 70 °C)	Regulation on Organic, Mineral and Microbial Fertilizers Used in Agriculture, Analysis Methods, Annex 19
Organic Fertilizers	Organic Matter Determination Pretreatment: Dry Burning at 550°C Determination: Gravimetric Method	Regulation on Organic, Mineral and Microbial Fertilizers Used in Agriculture, Analysis Methods, Annex 19
Fertilizers	Determination of Organic Carbon Titrimetric Method	TS 8336
Fertilizers	Determination of Mercury (Hg) Pretreatment: Microwave Assisted Digestion of Leachate Measurement: AAS- Cold Vapor Atomic Absorption	EPA 3051 A SM 3112 B
Fertilizers	Determination of Arsenic (As), Cadmium (Cd), Tin (Sn), Lead (Pb) Pretreatment: Microwave Assisted Digestion of Leachate Measurement: AAS - Graphite Furnace Method	EPA 3051 A SM 3113 B
Fertilizers	Determination of Nickel (Ni), Zinc (Zn), Copper (Cu), Chromium (Cr) Pretreatment: Microwave Assisted Digestion of Leachate Measurement: AAS-Flame Method	EPA 3051 A SM 3111 B

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Petroleum and Petroleum Products

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Fuel Oil Types , Diese, Gas Oil	Flash Point by Pensky-Martens Closed Cup Tester	ASTM D93
Fuel Oil Types, Gasoline Types, Diesel Types, Gas Oil	Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method	TS 1013 EN ISO 3675
Fuel Oil Types, Diesel Types	Ash Content Determination	ASTM D482
Gasoline Types	Determination of Lead (Pb) Amount AAS Method	ASTM D 3237
Gasoline Types, Diesel	Qualitative Determination of Active Sulfur Species Doctor Test	ASTM D4952

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Electrical,Electronic and IT Products and Devices

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Magnetic Materials	Gauss Measurement (0-30000 G)	In-house Method "TA.397.Rev.00" Magnetization Measurement

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