

INFORME DE ENSAYO E25-ERM-0375

SCT Laboratorio de Análisis Químico

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EDAR Baix Llobregat (Aigües de Barcelona)
Avda. de l'Estany del port s/n 08820 El Prat de Llobregat

Caldes de Montbui, 19 March 2025

Información Muestra

Fecha Recepción: 06/03/2025

Fecha Medicion: 06/03/2025

Referencia Muestra: EDAR El Prat- Antes

Referencia Laboratorio: E25-ERM-0375

Empresa (mediciones): 3201846206

Actividad:

Lugar Medicion: Antes filtro motor

Toma de Muestra: Toma de muestra realizada por personal del laboratorio

Método Muestreo: Bolsa inerte Flexfilm 3 L

Caudal (L/min):

Tiempo (min):

Volumen (L):

Información Análisis

Análisis Solicitado: Siloxanos Completo MSD (Si-COV-HC-RSH)

Metodo Análisis: Método Interno

Fecha Analisis: 12/03/2025

Técnica Análisis: Cromatografía de gases

Lím Cuantificación: 0.1 mg/m3

Incertidumbre INC (%):

Tratamiento Muestra:

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Resultados Análisis

Hidrocarburos Totales	5.38	mg/m ³
BTEX	0.31	mg/m ³
Organoclorados (CI)	n.d.	mg/m ³
COV Totales	5.60	mg/m ³

Nombre del COV	C (mg/m ³)*	L.Q. (mg/m ³) **	Incert (%) ***
1,2,4-Trimetilbenceno	<0,1	< 0.1	IND
1,3,5-Trimetilbenceno	<0,1	< 0.1	IND
4-Metil-2-pentanol	n.d.	< 0.1	±20.0
4-Metilpentan-2-ona	<0,1	< 0.1	IND
Acetato de etilo	n.d.	< 0.1	±11.8
Acetato de isobutilo	n.d.	< 0.1	±13.3
Acetato de isopropilo	n.d.	< 0.1	±29.4
Acetato de metilo	n.d.	< 0.1	±16.8
Acetato de n-butilo	n.d.	< 0.1	±13.6
Acetona	n.d.	< 0.1	±8.2
Alcohol etílico	n.d.	< 0.1	±14.0
Alcohol isobutílico	n.d.	< 0.1	±15.0
Alcohol isopropílico	n.d.	< 0.1	±14.0
Alcohol n-butílico	n.d.	< 0.1	±15.0
alfa-Pineno	0.36	< 0.1	±12.3
Benceno	n.d.	< 0.1	±11.4
Ciclohexano	n.d.	< 0.1	±11.5
Ciclohexanona	n.d.	< 0.1	IND
Cloruro de metileno	n.d.	< 0.1	±15.8
Dietiléter	n.d.	< 0.1	±20.0
Estireno	n.d.	< 0.1	±16.7
Éter metil-ter-butílico	n.d.	< 0.1	IND
Etilbenceno	<0,1	< 0.1	±17.1
Isooctano	<0,1	< 0.1	IND
Limoneno	n.d.	< 0.1	±11.8
Metiletilcetona	n.d.	< 0.1	±7.4
Hexanos	3.30	< 0.1	IND
Clorobenceno	n.d.	< 0.1	IND
p-Cymeno	0.56	< 0.1	±12.4
Percloroetileno	n.d.	< 0.1	±15.1
Heptanos	0.01	< 0.1	±11.7
Tetrahidrofurano	n.d.	< 0.1	±12.6
Tolueno	0.24	< 0.1	±10.9
Tricloroetileno	<0,1	< 0.1	±15.1
Triclorometano	n.d.	< 0.1	±11.6
Xilenos, (mezcla de isómeros)	0.06	< 0.1	±12.2
n-Pentano	n.d.	< 0.1	±12.1
n-Hexano	1.10	< 0.1	IND
n-Heptano	<0,1	< 0.1	IND
n-Octano	0.16	< 0.1	IND
n-Nonano	n.d.	< 0.1	IND
n-Decano	0.13	< 0.1	IND
n-Undecano	n.d.	< 0.1	IND
n-Dodecano	n.d.	< 0.1	IND
n-Tridecano	n.d.	< 0.1	IND
n-Tetradecano	n.d.	< 0.1	IND
n-Pentadecano	n.d.	< 0.1	IND
n-Hexadecano	n.d.	< 0.1	IND
n-Heptadecano	n.d.	< 0.1	IND
n-Octadecano	n.d.	< 0.1	IND
n-Nonadecano	n.d.	< 0.1	IND
n-Icosano	n.d.	< 0.1	IND

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		Silicio Total	0.60
			mgSi/m3
		Siloxanos Totales	1.58
			mg/m3
Nombre del Siloxano	C (mg/m ³)*	L.Q. (mg/m ³) **	Incert (%) ***
Trimetilsilanol	n.d.	< 0.1	IND
Tetrametilsilano	n.d.	< 0.1	IND
Hexametildisiloxano	<0,1	< 0.1	IND
Octametiltrisiloxano	<0,1	< 0.1	IND
Decametiltetrasiloxano	<0,1	< 0.1	IND
Dodecametipentasiloxano	n.d.	< 0.1	IND
Hexametilciclotrisiloxano	n.d.	< 0.1	IND
Octametilciclotetrasiloxano	0.14	< 0.1	IND
Decametilciclopentasiloxano	1.34	< 0.1	IND
Dodecametilciclohexasiloxano	n.d.	< 0.1	IND

		Mercaptanos (S)	<0,1
			mg/m3
Nombre del Mercaptano	C (mg/m ³)*	L.Q. (mg/m ³) **	Incert (%) ***
Etanotiol	<0,1	< 0.1	IND
Sulfuro de dimetilo	n.d.	< 0.1	IND
1-Propanotiol	0.20	< 0.1	IND
1-Butanotiol	n.d.	< 0.1	IND
Disulfuro de carbono	n.d.	< 0.1	IND
Disulfuro de dimetilo	n.d.	< 0.1	IND
Tetrahidrotiofeno	n.d.	< 0.1	IND

* Identificación compuestos realizada por coincidencia de tiempos de retención entre muestras y patrón externo

** L.Q. indica el límite de cuantificación del compuesto en mg/m3

*** IND indica que no se ha determinado la incertidumbre del método de análisis para esa sustancia

*** Resultados expresados en condiciones normales (T 0°C, P 1013 mbar)

Comentario de resultados

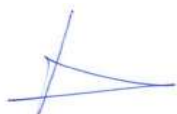
Resultados corregidos respecto al blanco


Analizado por:

Dr. Joan Noguerol

Aprobado por:

Dr. Joan Noguerol

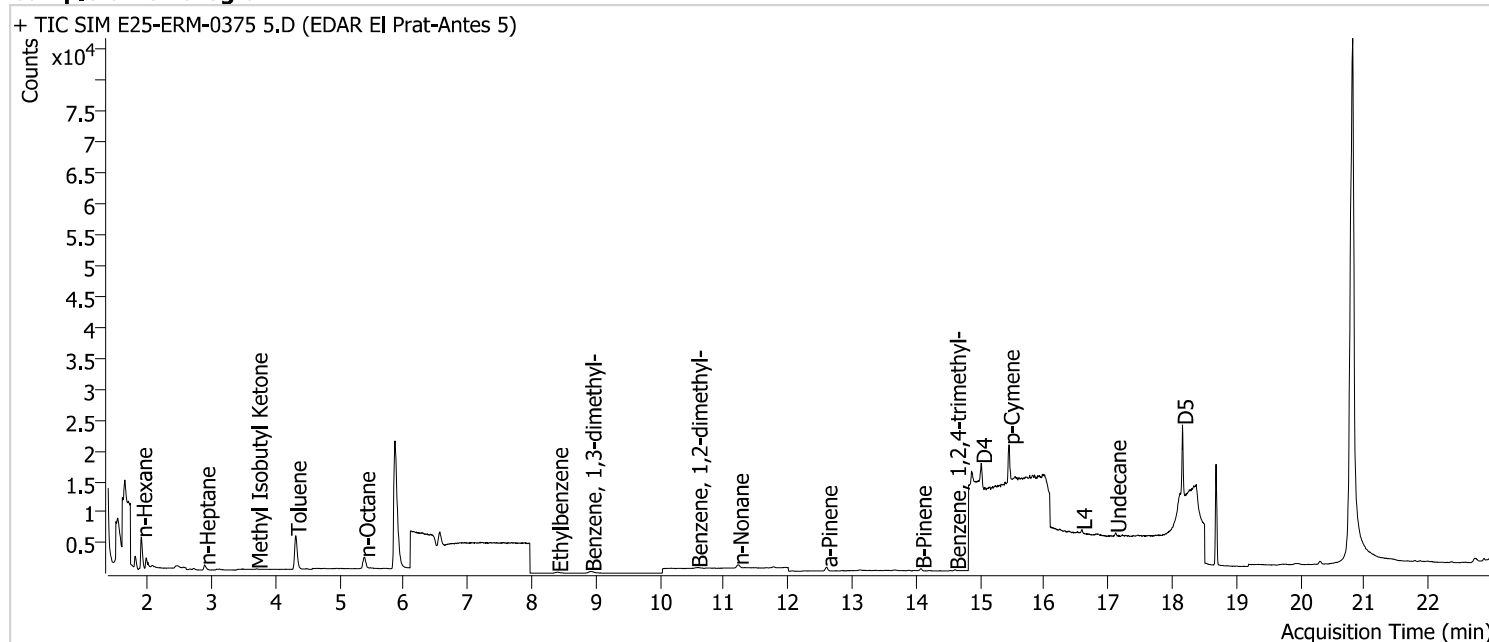




Analytical Report

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\Siloxanos\SIL 25-03-12\QuantResults\Batch SIL COMP 25-03-12.batch.bin	Analyst Name	DESKTOP-MV4DNT7\admin
Analysis Time Stamp	3/19/2025 9:46:47 AM	Report Generator Name	DESKTOP-MV4DNT7\admin
Report Generation Time	3/19/2025 9:47:53 AM	Batch State	Processed
Calibration Last Update	11/22/2022 9:10:04 AM	Report Quant Version	10.2
Analyze Quant Version	10.2	Data File	E25-ERM-0375 5.D
Acq. Date-Time	3/12/2025 11:19:09 AM	Name	EDAR EI Prat-Antes 5
Type	Sample	Acq. Method File	MSD SIL-COMP SIM 624 25-03-12.M
Dil.	1		

Sample Chromatogram



Name	RT	Transition	Resp.	Height	Final Conc.	Units
n-Ethanol		45.0			ND	mg/m3
L1		73.0			ND	mg/m3
Acetone		58.0			ND	mg/m3
Isopropyl alcohol		59.0			ND	mg/m3
Pentane		72.0			ND	mg/m3
Dimethyl sulfide	1.538	62.0	0	0.00	ND	ng/ml
Ethanethiol	1.538	62.0	1221	614.82	0.0001	mg/m3
Ethyl ether		74.0			ND	mg/m3
Acetic acid, methyl ester		74.0			ND	mg/m3
Methylene chloride		84.0			ND	mg/m3
Carbon disulfide	1.701	76.0	0	0.00	ND	ng/ml
TMS		75.0			ND	mg/m3
Propane, 2-methoxy-2-methyl- MTBE		73.0			ND	mg/m3
n-Hexane	1.906	86.0	1312	676.66	2.0669	mg/m3
2-Butanone MEK		72.0			ND	mg/m3
Ethyl Acetate		88.0			ND	mg/m3
Propyl mercaptan	1.983	76.0	2029	982.95	0.1642	ng/ml
Trichloromethane		83.0			ND	mg/m3
2-Propanol, 1-methyl-		74.0			ND	mg/m3
Tetrahydrofuran		72.0			ND	mg/m3
Benzene		78.0			ND	mg/m3
Cyclohexane		84.0			ND	mg/m3
Isopropyl acetate		87.0			ND	mg/m3
1-Butanol		31.0			ND	mg/m3
L2	2.665	147.0	264	112.79	0.0073	mg/m3
Pentane, 2,2,4-trimethyl-	2.715	99.0	26	14.41	0.0253	mg/m3
n-Heptane	2.893	71.0	408	179.19	0.0030	mg/m3

Analytical Report

Name	RT	Transition	Resp.	Height	Final Conc.	Units
Trichloroethylene	2.923	130.0	33	15.54	0.0003	mg/m3
1-Butanethiol		90.0			ND	mg/m3
Methyl Isobutyl Ketone	3.708	100.0	49	20.08	0.0110	mg/m3
Dimethyl disulfure		94.0			ND	mg/m3
2-Pentanol, 4-methyl-		45.0			ND	mg/m3
Toluene	4.315	91.0	9235	3104.31	0.1456	mg/m3
Isobutyl acetate		43.0			ND	mg/m3
n-Octane	5.388	85.0	1401	440.28	0.1337	mg/m3
Thiophene tetrahydro THT		88.0			ND	mg/m3
Tetrachloroethylene		166.0			ND	mg/m3
Acetic acid, butyl ester		73.0			ND	mg/m3
D3	6.563	207.0	0	0.00	ND	mg/m3
Benzene, chloro-		112.0			ND	mg/m3
Ethylbenzene	8.401	91.0	408	85.58	0.0091	mg/m3
Benzene, 1,3-dimethyl-	8.921	91.0	770	138.35	0.0394	mg/m3
Styrene		104.0			ND	mg/m3
Benzene, 1,2-dimethyl-	10.577	91.0	215	53.45	0.0094	mg/m3
L3	10.649	221.0	98	25.13	0.0113	mg/m3
Cyclohexanone		98.0			ND	mg/m3
n-Nonane	11.221	57.0	684	202.20	0.0000	mg/m3
a-Pinene	12.604	93.0	1016	400.23	0.5509	mg/m3
Mesitylene	13.881	105.0	113	49.18	0.0083	mg/m3
B-Pinene	14.075	93.0	596	254.52	0.3398	mg/m3
Benzene, 1,2,4-trimethyl-	14.611	105.0	204	97.87	0.0117	mg/m3
n-Decane	14.867	57.0	1785	1004.86	0.1073	mg/m3
D4	15.020	281.0	4181	2377.90	0.1409	mg/m3
3-Carene	15.064	93.0	133	70.48	0.0876	mg/m3
p-Cymene	15.447	119.0	6805	3781.95	0.4646	mg/m3
D-Limonene		93.0			ND	mg/m3
L4	16.582	207.0	424	260.99	0.0837	mg/m3
Undecane	17.114	57.0	424	280.73	0.0000	mg/m3
D5	18.159	355.0	4261	3015.47	1.2971	mg/m3
Dodecane		57.0			ND	mg/m3
L5		281.0			ND	mg/m3
Tridecane		57.0			ND	mg/m3
D6	20.814	341.0	0	0.00	ND	mg/m3