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S2923

PRECISION PETROLEUM LABS, INC.
CERTIFICATE OF ANALYSIS

LABORATORY ADDRESS 5915 Star Lane, Houston, TX 77057 Ph. 713-680-9425 Fax: 713-680-9564 Website: precisionlabs.org	Client Name: Harcros Chemicals Inc Street Address: 4606 New West Drive City, State, Zip: Pasadena, TX 77507
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INVOICE No.:	105282	DATE/TIME COLLECTED:	12/31/2024
LAB REFERENCE No.:	2024-12-542	MATRIX TYPE:	Liquid
AUTHORIZED BY:	Mitch Neal	SAMPLE TYPE:	Bulk
PRODUCT ID:	Caustic Soda 50%		
DATE RECEIVED:	12/31/2024	LOT # PA001015G4	

<u>PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULT</u>
Ammonium Hydroxide precipitate, Wt.%	0.01 Max	< 0.01
Assay (NaOH), Wt.%	50 Min-52 Max	50.0
Assay (Sodium carbonate), Wt.%	0.25 Max	< 0.1
Chloride (Cl), Wt.%	0.005 Max	< 0.001
Color, APHA	20 Max	< 5
Heavy metals (as Ag), Wt.% EPA-6010B	0.002 Max	< 0.001
Iron (FE), Wt. % EPA-6010B	0.0005 Max	< 0.0005
Nickel (Ni), Wt.% EPA-610B	0.0005 Max	< 0.0005
Nitrogen compounds (as N), Wt.%	0.0005 Max	< 0.0005
Phosphate (PO4), Wt.%	0.0005 Max	< 0.0005
Potassium (K), Wt.% EPA-6010B	0.025 Max	< 0.002
Sulfate (SO4), Wt.%	0.003 Max	< 0.003



Daniel Zabihi
QA Manager
Date: 01/02/2025



PRIMARY ACCREDITATION TCEQ, #T104704203-23-17
ARIZONA LICENSE # AZ0630

QUALIFIERS & ABBREVIATIONS: BRL - Below Reporting Limit; SCL - Test performed by an approved subcontract laboratory; B - Analyte was detected in the associated method blank; Matrix spike/matrix spike duplicate (M), Laboratory control sample (L), Calibration criteria (C), and Surrogate (S) recoveries were outside acceptance limits. Test deviation applied to Method 8260 (VOCS). Sample date analyzed for each test is available upon request. *Not on laboratory's field of accreditation.

COMMENTS: This certificate is Confidential Business Information and will only be provided to designated customer point-of-contact(s). Other production of this report requires prior authorization from the customer. There were no quality assurance anomalies associated with these tests.

PRECISION PETROLEUM LABS, INC.'S RESPONSIBILITY FOR THE ABOVE ANALYSIS, OPINIONS OR INTERPRETATIONS IS LIMITED TO THE INVOICE AMOUNT. RESULTS ARE REPORTED ON AN "AS IS" BASIS, UNLESS OTHERWISE NOTED. THE TEST RESULTS RELATE ONLY TO THE SUBMITTED SAMPLE IDENTIFIED ON THIS REPORT. TEST RESULTS MEET ALL REQUIREMENTS OF NELAP FOR TESTS LISTED ON THE LABORATORY'S CURRENT FIELDS OF ACCREDITATION (EPA 1910, 6010, 8082, 8260, and 9075).



Certificate of Analysis

Reagent Chemical & Research Inc
115 US Highway 202
Ringoos NJ 08551

502908

S 2923
500303
500701

Covestro LLC
1 Covestro Circle
Pittsburgh PA 15205

Date 2024-12-27

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Product name
SODIUM HYDROXIDE SOL 50%
TANK TRUCK

Product number
02818640

Customer purchase order data

Ship-to party 3450424 Reagent Chemical & Resear	Order quantity 20866 KG	Cust. purchase order 151002562 821184
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Order data

Order no. 3014691360 / 10	Delivery no. 4008770652 / 10	Quantity delivered 20580 KG	VEH. Ident. 303/303
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Batch data

Batch no. PA88101564	Quantity delivered 20580 KG	Date shipped 2024-12-27	Date of manufacture 2024-12-09
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Manu. location: Baytown, Texas, USA

Inspection 080000371241	Result	Specification	Unit
NaOH Appearance	Clear and free		
Assay (NaOH)	50.09	49.00 - 51.50	%
Na2O	38.81	37.97 - 39.90	%
Sodium chloride	31	<= 100	ppm
Iron	1	<= 3	ppm
Sodium Chlorate	4	<= 20	ppm
Sodium Sulfate	3	<= 20	ppm
Sodium Carbonate	0.0050		%

If any question related to this certificate arise, please contact:
Tel.: 877-229-3778

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