

S. O. Lev. Co. of N. J.

Translation of Technical Oil Mission Microfilm Reel #38
Foot 28 - Frame 9
Foot 29 - Frame 1

ANALYTICAL METHODS FOR A SYNTHESIS PLANT

<u>Page No.</u>	<u>Method No.</u>	<u>Method</u>
1	1	Ammonia water
8	2	Waste lime
9	3	Ground limestone
10	4	Burnt lime
17	5	Technical lye
18	6	Technical caustic soda
22	7	Nitric acid
26	8	Sulfuric acid
34	9	Determination of calorific value of coals
49	10	Determination of traces of oxygen in gases
54	11	Determination of H ₂ S in coke gas
61	12	Spent gas purification mass
75	13	Investigation of fresh gas purification mass with regard to its potency for H ₂ S removal
83	14	Bog iron ore
86	15	Luxmass
88	16	Determination of the combustion yield of the catalytic ammonia oxidation with a platinum catalyst
108	17	Investigation of the reaction gases in the combustion of ammonia to nitric acid
115	18	Investigation of the concentrate from the Montan saturator and determination of the nitrogen loss
130	19	Investigation of liquid and gaseous ammonia

<u>Page No.</u>	<u>Method No.</u>	<u>Method</u>
142	20	Exhaust gas
157	21	Gas saturation tests
162	22	Gas density
173	23	Investigation of Girbotol solutions (ethanolamine potassium-phosphate solution)
178	24	Investigation of pure Girbotol
189	25	Investigation of the alkaline washings from the carbon dioxide washings from coke gas and a few other alkaline solutions from the plant
201	26	Determination of very small amounts of acetylene in gases
211	27	Determination of the chlorine content of residual gases
213	28	Determination of small amounts of ammonia in gases
218	29	Determination of total and organically bound sulfur in coke gases
224	30	Determination of small amounts of CO ₂ in synthesis gas from the ammonia synthesis
233	31	Ammonium nitrate
249	32	Investigation of the used catalysts from the cobalt and thorium holders
272	33	Fresh catalyst
282	34	The determination of naphthalene in coke gases
285	35	Investigation of used Kieselguhr
288	36	Determination of methane in hydrogen
293	37	Flash point of lubricating oils
297	38	Specific gravity and density of lubricating oils
304	39	Solidification point of lubricating oils

<u>Page No.</u>	<u>Method No.</u>	<u>Method</u>
306	40	The ash content of lubricating oils and greases
308	41	Determination of neutralization and saponification numbers of oils
311	42	Determination of solid impurities and asphalts in oils
313	43	Kieselguhr
321	44	Determination of small amounts of water in hydrocarbons, particularly in motor benzol and gasoline
325	45	Sodium nitrate
339	46	Determination of small amounts of chlorides
345	47	Determination of water in mineral oils
349	48	Determination of water in alcohols
353	49	Determination of peroxides in mineral oils
355	50	Deterioration of oils (determination of the tar and coke numbers according to the BW method in Bochum)
358	51	Determination of iodine numbers of gasolines and oils
362	52	Impregnating oils
363	53	Feinreinigung mass
372	54	Determination of isobutylene in gas oils
372	55	Calorific value of gases
393	56	Deterioration of lubricating oils (behavior in the presence of oxygen)
409	57	Determination of hydrocyanic acid in coke gases
417	58	Tables for the calculation of density and calorific value of gases

<u>Page No.</u>	<u>Method No.</u>	<u>Method</u>
454	59	Test for the activity of catalysts for the ammonia syntheses according to Casals
476	60	Determination of isobutylene in gas oils by the addition of hydrochloric acid (compare analytical method #54)
485	61	Determination of hydrocarbons from one to five carbon atoms and the isomers of butane and butylene by fractional distillation