

INDEX - TCM REEL 305  
(Original Designation FIAT Reel X-116)  
PB L52060

Documents taken from Steinkohlenbergwerk Rheinpreussen, Moers

Frames

- 1593-1630 Gasoline synthesis in the liquid medium. Report No. II. (Three graphs and one diagr. attached.) No author or date.
- 1631-1672 Carbon monoxide hydrogenation in the liquid medium. Report No. III. No author or date.
- 1673-1683 X-ray and magnetic investigation of iron catalysts. (Report starts with p. 165.) No author or date. (Figs. 24-27, which are graphs, are also included.)
- 1684-1716 Formation of the cycle of the iron catalyst for the normal pressure operation. No author or date.
- 1717-1787 Gasoline synthesis with iron catalysts in the gas phase. Report of laboratory research from Feb. 1942 to Feb. 1945. Report signed by Dr. Ackermann. (Twenty-eight tables included in report.)
- 1788-1795 Report on the Reichsamt investigation with iron catalysts at medium pressure in straight passage. Report dated July 5, 1944, Schwarzheide. Author's signature illegible. (One graph attached.)
- 1796 Title page: II, Alcohols, esters, ketones...A. Monovalent alcohols.
- 1797 Note on the dehydration installation for alcohols at Treibstoffwerk Rheinpreussen, Meerbeck. No author or date.
- 1798-1801 Yield determination, in the working up of a reaction mixture of 75% sulfuric acid and gasol. Report signed by Grimme. No date.
- 1802-1806 The steam pressure increase of gasoline by methanol and ethanol. Report signed by Grimme, dated May 27, 1938.
- 1807-1809 Balance of the alcohol formation in the semi-technical experiment at Ruhrchemie. Report signed by Grimme, dated Sept. 3, 1938.
- 1810-1814 Solubility of polymer gasoline in water-alcohol, water-alcohol-sulfuric acid and water-alcohol-sulfuric acid-ester mixtures. Report dated Nov. 18, 1938. No signature. (One graph attached.)
- 1815-1817 Balance investigation in the alcohol plant. Report signed by Grimme and Campen, dated May 3, 1941.
- 1818-1822 Purification of residue gasol. Report dated Dec. 29, 1942. Signature illegible. (Two diagrs. attached.)

Frames:

- 1823-1825 Saponification. Report bearing Grimme's signature and dated Aug. 2, 1940.
- 1826-1833 Synthesis of isopropyl and secondary butyl alcohol from olefins over the sulfuric acid ester. Report dated Jan. 29, 1947, Chemische Werke. Signature illegible. (Diagr. attached.)
- 1834-1964 Extensive report on the formation of alcohols from olefins. Report is signed by Grimme and Hügel. No date, (List of tables and figures and bibliography appear at end of report.)
- 1965-1980 Monthly reports of the alcohol plant - June 1941, Nov. 1941, April 1942, Nov. 1942, March 1943, Jan. 1944.
- 1981-1985 Esterification. Letter from Grimme to the Firma Richard Avenarius, dated Sept. 22, 1939. (One diagr. attached.)
- 1986-1988A Dehydration installation. Apparatus for the separation of pentanol and higher alcohols. Letter from Gebrüder Avenarius to Steinkohlenbergwerk Rheinpreussen Treibstoffwerk, dated Sept. 16, 1940. (Two diagr. attached.)
- 1989-1991 Description of the procedure in a dehydration installation according to Diagr. F 3082 XIIIa. Report from Gebrüder Avenarius. No author or date.
- 1992-1994A Description of the procedure of an installation for the working up of a mixture of ether alcohols, water, sulfuric acid, and other compounds, according to Diagr. F 3100 VIIe. Report from Gebrüder Avenarius, dated May 25, 1938. No signature. (Diagr. F 3100 VIIe attached.)
- 1995-1998 Conference with Dr. Avenarius on April 1, 1942 at Treibstoffwerk Rheinpreussen on the construction of a dehydration installation for amyl alcohol. Report dated April 4, 1942. Signature illegible. (Diagr. of the ternary system: secondary amyl alcohol - secondary butyl alcohol - water.)
- 1999-2001 Level of production and method of procedure in amyl alcohol production. Report signed by Grimme, dated March 18, 1943, Treibstoffwerk.
- 2002-2015 The production of amyl alcohol from the pentane fraction of the stable gasoline. Report of work done by Dr. W. Grimme and Dr. W. Hausser in the research laboratory of the Treibstoffwerk during Jan.-Sept. 1943. (Tables and graphs included in report.)
- 2016-2029 Experiments on the preparation of amyl alcohol. Report by Dr. Hügel, dated July 20, 1940. (Five hand-written tables attached.)

Frames

- 2030-2061 The preparation of higher alcohols from olefins. Report by Campen of work concluded in Oct. 1943. Supplement to report entitled: "The preparation of higher alcohols from olefins. Hexyl and heptyl alcohol," is attached. Supplement is signed by Dr. Campen and dated July 20, 1945.
- 2062 Title page  
II. Alcohols, esters, ketones.  
B. Polyvalent alcohols.
- 2063-2068 Glycerol M. Letter signed by Grimme, dated Sept. 2, 1943 to Firma Hescho.
- 2069-2072 Conference at "Wasag" (Werk Sythen) on April 10, 1943 concerning the addition of Glycerol M as a trinitro product for explosives. Report signed by Schmitt, dated April 13, 1943, Treibstoffwerk.
- 2073-2075 The production polyvalent alcohols as a substitute for glycerine. Report to the Generalbevollmächtigten für Sonderfragen der Chemischen Erzeugung, dated Aug. 3, 1943. No signature.
- 2076-2078 Glycerol plant. Report dated Sept. 4, 1943, Treibstoffwerk. No signature.
- 2079-2082 Process for the production of trivalent alcohol by hydrogenation of di-methylol ketones. (German Patent Appl. St 63,701 IVd/12 o, of Dec. 13, 1943, referred to in hand-written note.) Draft of a patent with no author or date.
- 2083-2095 Process for the production of polyvalent alcohols. Draft of a patent dated May 9, 1944, Homberg. No author.
- 2096-2098 Production of polyvalent alcohols as a substitute for glycerine. Report signed by Grimme, dated July 11, 1944, Treibstoffwerk Rheinpreussen, Moers-Meerbeck.
- 2099-2141 The condensation of ketones, particularly methyl ethyl ketones, and formaldehyde to di-methylol methyl ethyl ketones with consideration of a subsequent hydrogenation of the keto group to an alcohol group. Report signed by Dr. W. Grimme and Dr. C. Schmitt, dated March 1944, Treibstoffwerk. (Tables included in report.)
- 2142-2168 The preparation of di-acetone alcohol. Report signed by Dr. W. Grimme and Dr. C. Schmitt, dated June 1944, Treibstoffwerk Rheinpreussen (Six diagrs. included in report.)
- 2169-2204B The hydrogenation of keto alcohols to polyvalent alcohols. Report signed by Dr. W. Grimme and Dr. C. Schmitt, dated Sept. 1944, Treibstoffwerk Rheinpreussen. (Diagr. R 2354 of a diol plant for ketonization and condensation attached.)

Frames

- 2205 Title page:  
II. Alcohols, esters, ketones  
C. Ketonization and ketones.
- 2206-2209 Research report on the operation of semi-technical apparatus for ketonization, carried out during Jan. 27 - Feb. 15, 1941. Report signed by Dr. Wiedmann, dated May 3, 1941, Treibstoffwerk.
- 2210-2216 Concluding report on ketonization. Report signed by Schmitt, dated March 12, 1942, Treibstoffwerk.
- 2217-2219 Report on the starting up of the ketonization plant from April 27-29, 1942. Report dated May 4, 1942, Treibstoffwerk. No signature.
- 2220-2223 Dehydrogenation of iso-propyl alcohol. (Ketonization plant.) Report signed by Josten, dated June 15, 1942, Treibstoffwerk. Signature illegible.
- 2224-2225 Result of the ketonization of iso-propyl alcohol with catalyst K 67 in an experimental oven. Report by Josten, dated Dec. 7, 1942, Treibstoffwerk.
- 2226-2228 Process for the production of di-methyl acetone and its homologs. Draft of a patent, dated Feb. 12, 1944, Treibstoffwerk. No author.
- 2229-2233A Ketonization of secondary alcohols to ketones. Report signed by Josten, dated Jan. 29, 1947, Chemische Werke. (Flow diagr. of a ketone plant attached.)
- 2233 Title page:  
II. Alcohols, esters, ketones  
D. Esters
- 2234-2239 Process for the continuous preparation of esters. (Three diagrs. attached.) No author or date.
- 2240-2273 Preparation of esters of iso-propyl alcohol, secondary butyl alcohol and amyl alcohol with acetic, propionic and butyric acid. (One table, seven diagrs. and fourteen graphs attached.) No author or date.
- 2274-2276 Preparation of secondary butyl chloride from secondary butyl alcohol and hydrogen chloride. Report signed by Dr. Campen, dated Dec. 1939.
- 2277-2290A Preparation of esters. Second report. (First report, Nov. 17, 1939.) Report signed by Grimme and Campen, dated Jan. 30, 1941. (One diagr. attached and list of patents attached.)

## Frames

- 2291-2330 Preparation of octyl acetate and acetic esters of secondary alcohols with more than eight carbon atoms. Report dated Oct. 1941, Treibstoffwerk, Meerbeck. (Author questionable - signature of Rügél appears on title page of report and signature of Grimme appears at end of report.) (Four diags. and two graphs attached.)
- 2331 Title page.  
II. Alcohols, esters, ketones.  
E. Aluminum alcoholate.
- 2332-2334 Process for the stabilization of metal alcoholates. Draft of a patent, dated May 20, 1940. No author.
- 2335-2336 Investigation of the pH value of aluminum hydroxide paste. Report signed by Josten, dated June 17, 1942, Treibstoffwerk. Signature illegible.
- 2337-2339 Adsorption isotherms of various aluminum oxides. Report No. 272 from Lurgi Gesellschaft für Wärmetechnik m.b.H., signed by Eisenlohr, dated July 8, 1942, Frankfurt. (One graph attached.)
- 2340-2343 Production of aluminum hydroxides of small bulk density. Report signed by Josten, dated Oct. 1, 1942, Treibstoffwerk. Signature illegible.
- 2344-2345 Aluminum hydroxide - Co<sub>2</sub> production in operation. Report dated Oct. 30, 1942, Treibstoffwerk. No signature.
- 2346-2347 Preparation of aluminum acetate and secondary butyl formic acid ester. Report signed by Josten, dated Oct. 4, 1943, Treibstoffwerk.
- 2348-2353 Aluminum alcoholate process with aluminum compounds preparable by it. Report signed by Wiedmann, dated Jan. 31, 1944, Treibstoffwerk.
- 2354-2355 Aluminum compounds. Letter from Steinkohlenbergwerk Rheinpreussen to the Reichsamt für Wirtschaftsausbau, dated Feb. 1, 1944.
- 2356-2361 Aluminum alcoholate process with aluminum compounds preparable by it. Report signed by Grimme, dated Feb. 1, 1944. (One diagr attached.) (Similar to report on Frames 2348-2353.)
- 2362-2366 The accumulation of nitrogen oxide on secondary aluminum butylate. Report signed by Josten, dated March 24, 1944, Treibstoffwerk. (One hand-written table attached.)
- 2367-2392 The product "Rh 6" (aluminum alcoholate) prepared at Treibstoffwerk Rheinpreussen, and its use as raw material for the preparation of lacquer. Report from the Abteilung für Farben und Lacke der Textilingenieurschule at Krefeld. Report by Ilse Groscheim, dated in 1944.

Frames:

- 2393-2393A Table showing the conversion of aluminum secondary butylate and magnesium-n-butylate with phthalic acid, phthalic acid anhydride and fatty acids C<sub>6</sub>-C<sub>9</sub>. Reaction vessel is two-liter round flask, wide-necked, with reflux condenser and stirrers. Oil bath heating, 110° C/1 hr. at all charges. Table is dated Aug. 21, 1944.
- 2394-2425 The production of light aluminum hydroxide or oxide as gum filler. Summary and evaluation of Investigation I of development work carried out under the guidance of Dr. H. Wiedmann during 1940-1944. Report by Dr. Josten, dated Oct. 1946.
- 2426-2430 Aluminum alcoholate process and aluminum compounds preparable by it. Report signed by Josten, dated Jan. 29, 1947, Chemische Werke.
- 2431 Diagram of the Rheinpreussen process for obtaining aluminum oxide from aluminum alloys. Dated Aug. 23, 1946.
- 2432-2443 Experiments with the liquation remains of the Erftwerk fine and rough aluminum alloy tests of Nov. 17, 1946. Part I. (Reaction of aluminum and butanol used in investigating aluminum conversion action). Report is dated Feb. 10, 1947. No signature.
- 2444-2473 Experiments with the liquation remains of the Erftwerk tests of Dec. 20, 1946. Part II. (Reaction of aluminum and alcohol used in investigating aluminum conversion action.) Report is dated Feb. 17, 1947 and signed by Josten with a note of credit to Haferkamp who guided the experimental work.
- 2474 Title page:  
Synthetic lubricants.
- 2475-2488 Capacity and size of the apparatus for a 1000-ton lubricant installation at Rheinpreussen. Report dated Dec. 1, 1939.
- 2489-2523 Lubricants from Kogasin and tar distillation products. Part I. Kölbel Rept. No. 56, by Dr. Herbert Kölbel and Dr. Harry Welz, dated Nov. 3, 1937. (One table attached.)
- 2524-2543 Lubricants from Kogasin and tar distillation products. Part II. Unnumbered Kölbel Report. No date or signature. (Seven tables included in report.)
- 2544-2560 Lubricants from Kogasin and tar distillation products. Part III. Kölbel Rept. No. 77, dated May 17, 1938.