

Index to Microfilm Reel 32 - Part I

Item No.	BAG 2078 Date	Approximate Length (Pages)	Descriptive Title
93	Aug. 23, '40	15	Research on the "Oxo" reaction (addition of CO + H ₂ to olefins and other unsats.)
94	Jan. 8, '44	5	(f) Evaluation of Rocket Fuels
95	Oct. 1, '44	13	Progress report on ergol fuels. Effect of the oxygen-carrier: fuel ratio on ignition delay, in hypergol systems.
96	Sept. 30, '44	12	An apparatus for measuring ignition delay.
97	Aug. 28, '44	7	Ignition delay in a ternary hypergol system: Furfuryl alcohol + aniline + 2-methyl-tetrahydroprrole.
98	Aug. 28, '44	20	Physical and chemical studies of T-stuff (hydrogen peroxide solutions: catalytic decomposition).
99	Aug. 20, '44	11	Corrosion of metals by various oxygen-carriers.
100	Aug. 20, '44	5	Calculations for the combustion of organic compounds with nitric acid and hydrogen peroxide.
101	Aug. 28, '44	12	Experiments with the hypergol ignition tester.
102	May 31, '44	16	Hypergol reactivity of various organic compounds (ignition with HNO ₃ and H ₂ O ₂).
103	Jan. 5, '44	11	Effect of additives on the ignition of Methanol by air.
104	Feb. 10, '42	15	Hypergols having nitric acid as the oxygen-carrier, and various amines as the fuel-component.
105	Apr. 15, '42	32	Mixtures of cyclohexylamine and aniline as hypergol fuel-components.
106	Dec. 5, '42	15	Hypergol fuels based on mixtures of vinyl-n-butyl ether and butanedio-divinyl ether.
107	Jan. 6, '43	15	Summary of results obtained up to end of 1942 with fuels based on amines and vinyl derivatives. Tables to be added to Item 107.
108	Jan. 6, '43	23	Investigations of explosives based on hydrogen peroxide - Part II.
109	Aug. 1, '39	20	Investigations of explosives based on hydrogen peroxide - Part I.
110	July 1, '38	95	Vapor-liquid equilibrium diagram: water-hydrogen peroxide.
111	Undated	1	Graphs representing the decomposition of hydrogen peroxide concentrates.
112	'42-'43	3	(g) Explosive Decomposition of Acetylene
113-114	Undated	2	Graphs representing the decomposition of acetylene-methane and acetylene-nitrogen mixtures.

Item No.	Date	Approximate Length (Pages)	Descriptive Title
115	Nov. 25, '43	5	Conference regarding safety in acetylene lines, particularly during air-raids.
116	Sept. 2, '43	3	Memo on the acetylene fire in the butynediol plant on Sept. 1, 1943.
117	June 11, '43	9	Acetylene content of air.
118	Sept. 24, '42	31	Summary report: Research on acetylene decomposition.
119	Nov. 11, '42	3	Drying acetylene (with potassium hydroxide).
120	Aug. 22, '42	13	Conference report discussing an acetylene explosion (decomposition) in the butynediol reactor at Schkopau.
121	Jan. '42	5	Commercial production and purification of acetylene.
122	Dec. 29, '41	2	Chlorine and sulfur content of Ludwigshafen (606) acetylene.
123	Nov. 25, '41	5	Conference on safety in handling acetylene (butynediol production).
124	July 15, '41	4	Preventing decomposition of acetylene flowing under pressure (patent appl.).
125	Dec. 10, '40	7	Conference on acetylene decomposition.
126	Aug. 28, '40	4	Acetylene explosion-arresters.
127	- '40	5	Preventing acetylene-air explosions by addition of CO ₂ or N ₂ .
128	June 15, '40	1	Explosion-arrester for acetylene decomposition.
129	June 6, '40	1	Ignition experiments with acetylene-CO ₂ mixtures.
130	Feb. 5, '40	6	Experiments on acetylene decomposition.
131	May 8, '30	38	The decomposition of concentrated and dilute acetylene, by employment of initial ignition.
132	Feb. 3, '36	17	Explosion experiments with vinylacetylene. <u>(h) Manufacture and use of High-Concentration Hydrogen Peroxide (T-stuff)</u>
133	Feb. 28, '45	1	Standardized testing of catalysts for T-stuff decomposition.
134	Feb. 23, '45	1	Discussion of further work on the decomposition of T-stuff.
135	Dec. 8, '44	60	Development of distillation process for concentrating hydrogen peroxide.
136	July 28, '44	2	Letter concerning aluminum tanks for storage of H ₂ O ₂ concentrate.
137	June 24, '44	2	Catalytic decomposition of hydrogen peroxide (T-stuff).
138	Aug. 17, '44	3	Instructions for storing hydrogen peroxide concentrate.
139	July 1, '44	24	Instructions for handling and storing hydrogen peroxide concentrate.
140	July 3, '44	12	Directions for various analytical tests on D1R & D2R (H ₂ O ₂ concentrates).
141	Mar. 7, '44	16	Safety in storage of hydrogen peroxide concentrate, particularly against explosive and incendiary bombs.
142	Feb. 21, '44	1	Drawing of aluminum tank for T-stuff storage.

Item No.	Date	Approximate Length (Pages)	Descriptive Title
143	Undated	1	Flow sheet of plant for manufacturing T-stuff (H ₂ O ₂ concentrate)
144	June 24, '44	10	Detail drawings of flanges and tubes for T-stuff storage.
145	July 18, '44	1	Letter concerning aluminum tanks for T-stuff storage.
146	Aug. 7, '44	2	Transport of T-stuff (letter).
147	Aug. 16, '44	13	Hydrogen peroxide distillation process: 2-stage vaporization in one column with two bottoms.
148	Aug. 28, '44	18	Physical and chemical data on T-stuff.
149	Dec. 20, '43	3	Stabilizers for T-stuff (to inhibit H ₂ O ₂ decomposition)
150	Dec. 1, '43	3	Preparation 77 (T-stuff stabilizer).
151	Nov. 16, '43	2	Solvents for use in hydrogen peroxide production.
152	Oct. 16, '43	7	Proposed process for concentrating the 20% H ₂ O ₂ solution.
153-5	June 4, '44	3	Drawings of aluminum tanks for storing H ₂ O ₂ concentrate.
156	Mar. 30, '45	2	Flow sheet of process for obtaining 85% hydrogen peroxide from ethylanthraquinone.
157	Apr. 29, '43	4	Requirements of alloy steels, aluminum, etc., for the hydrogen peroxide plant.
158	Jan. 5, '42	3	Hydrogen peroxide from alkylanthraquinones.
159	Apr. 8, '37	2	Process for producing hydrogen peroxide (patent).
160	June 1, '40	5	Process for the catalytic reduction of free fatty acids to the corresponding alcohols.
161	June 20, '38	7	Process for producing peroxides, especially H ₂ O ₂ .
162	Nov. 9, '37	8	Process for producing peroxides (especially H ₂ O ₂).
163	Apr. 3, '36(?)	9	Production of hydrogen peroxide and alkali peroxides by auto-oxidation of organic compounds.
164	Oct. 9, 1935	5	Process for producing hydrogen peroxide.
165	Feb. 8, '43	7	(i) Hydrogen Supply of Ludwigshafen
166	Nov. 22, '40	10	Memorandum: Hydrogen supply at Ludwigshafen and Oppau. Electrolytic hydrogen balance.
167	Apr. 20, '44	3	(j) Physical data on Butadiene and Related compounds
168	Undated	26	Thermodynamic constants of butadiene.
169	Undated	7	Physical properties of butadiene and related compounds.
170	May 23, '41	16	(k) Physical and Chemical Properties of Acetylene and Derivatives
171	Nov. 22, '44	9	Properties of acetylene and some derivatives thereof.
172	July 12, '44	3	Determination of chlorine, sulfur, and phosphorus in acetylene
173	June 1, '44	28	(l) Ignition characteristics of motor fuels; Improvement of Same Current problems under consideration at the Oppau Engine Labs. Engine ratings of various fuels and additives. The preparation, properties and engine behavior of some tertiary butyl ethers.