BIOS No. 3042 - TARGET No. 30/4.02 LEUNA.

A Butane Dehydrogenation and Isomerization.

1 Equilibrium calculation for the dehydrogenation of butane.
2 Memorandum on alkylation, dehydrogenation and isomerization problems.
3 Memorandum on isomerization.
4 Manufacture of dehydrogenation catalyst.
5 Separation of butenes and butylenes by azeotropic distillation.
6 Catalyst evaluation method.
7 Design for dehydrogenation, isomerization and alkylation plant at Scholven.
8 Comparison of catalytic hydrogenation with chlorination dehydrochlorination
9. do. do. do.
10. Status of development work on hydrogenation, isomerization, alkylation at Leuna.
11. History of the development of dehydrogenation of isobutane, isomerization and alkylation at Leuna.
12 Comparison of catalytic hydrogenation with chlorination dehydrochlorination.
13 Octane No. of fractions of alkylate
14 Dehydrogenation of propane by chlorination.
15 Patent application for chlorination of paraffins.
16 Design of dehydrogenation, isomerization and alkylation for Böhlen.
16a Design of dehydrogenation, isomerization and alkylation for Wesseling.
17 Design
18 do. do for Pölitz.
19 do. do for Brüx.
20 Inspection data of alkylate blends.
21 Exchange of experiences on alkylation and related subjects.
22 Reworking of spent dehydrogenation catalyst.
23 Analytical data on alkylate.
24 Plant experiments on dehydrogenation of butane.
25 Butane and propane dehydrogenation with fixed catalyst bed.
26 Utilization of spent alkylation acid.
27 New design of dehydrogenation furnace at Pölitz.
28 Exchange of experiences with dehydrogenation and alkylation plants
29 Dehydrogenation of butane with fixed bed catalyst.
30 Drying of dehydrogenation catalyst.
31 Use of propylene in alkylation.
32 Use of butylene from Fischer-Tropsch for alkylation.
33 Conference on isomerization 4/21/42.
34 Experiments on the removal of butadiene from the reaction gases from butane dehydrogenation
35 Enrichment of lower Aliphatic olefins from olefin-paraffin mixture by absorption in silver solution.
36 Catalytic dehydrogenation of propane to propene.
37 Method of dehydrogenation of gaseous hydrocarbons.
38 Method of preparing valuable fuels (H_2SO_4 alkylation).
39 " " " " (Conc. of C_4)
40 Solvent extraction of light olefins from olefin- paraffin mixtures.
41. Hirschbeck, - Catalytic Dehydrogenation of isobutane.

(B) M i s c e l l a n e o u s.

42 First period of operation of Arobin Plant.
43 Kuckuck - Correspondence Codes.
44. Dehydrogenation of 1-1-3-dioxane to amylene glycol.
45 Report on visit to Leverkusen re Synol or Oxo alcohols (C_7-C_9)

46. Determination of sulfur and chlorine in tin-containing oils.
47. Determination of chromium and zinc in catalysts
48. Determination of carbon disulfide in benzene.
49. Use of Raman spectra in analysis.
50. Method for recovering hydrogen-peroxide.
51. Breaking of crude oil emulsion.
52. Preparation of methylamine from methanol and ammonia ... the use of pressure and a catalyst.
53. Experiments on preparation of adipic acid and alkyladipic acids
54. Chemical equilibria in the Claus process.
55. Production of synthetic montmorillonite from generator slag for treatment of used lubricating oil.
56. Theory of electrolytic synthesis of sebacic acid from adipic acid.
57. Determination of neutral oil content of phenol oils and phenol waste liquor
58. Solubility of cyclohexanone oxime in cyclohexane.
59. Dephenolizing phenolic water by means of flue gas from the boiler house
60. Polyurethane
61. Triptane.
62. Method for refining waxy oils.
63. Method for preparation of aliphatic diamines.
64. Method of preparation of condensation products.
65. Preparation of amines from aldehydes and ketones by hydrogenation in the presence of ammonia.
66. Chemical Reports, April 1948.
67. Preparation of aromatic amines by hydrogenation under pressure.
68. Preparation of Diesel Oil and coal middle oil through extraction with butane-SO_2
69. CO_2 Washer Designs
70. Paraffin nitration

(C) Catalytic Cracking.

71a Aviation Gasoline by catalytic cracking.
71. Reconstruction of K.K. — Experimental reactors.
72. A fluid catalyst process.
73. 40,000 ton/yr. catalytic cracking (K.K.). plant for Moosbierbaum
74. Catalytic cracking experimental comparison between moving and fixed bed operation.
75. Status of catalytic cracking of June 1948.
76. A method of converting hydrocarbons through heating in the presence of a catalyst.
77. Burning Velocity of coke from catalyst in catalytic cracking process.
78. Catalytic cracking of pure hydrocarbons.
79. Catalytic cracking in a fixed bed - Report of Leuna pilot plant.
80. Aircraft fuel from catalytic cracking.
81. Fluid catalytic cracking.
82. Catalytic cracking of hydrocarbons

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