

Technical Data Sheet

Heavy AlkylBenzene (HAB)

Heavy alkyl benzene (HAB) is a byproduct in the process of linear alkyl benzene (LAB) production. It is used as heat transfer oil and lubricating greases. The potential of the usage of HAB in the formulation of gasoline and diesel engine oils as well as hydraulic fluid is indicated. With the aim of passing 5W30, 5W40, 10W40, and 15W40 standards, different engine oils have been formulated. The formulations contain various amounts of HAB as minor component, and miscellaneous quantities of solvent neutral 100 (SN-100), SN-150, and SN-650 as major component. The measurement of typical properties of obtained oils indicates that some of them do have the intended criteria. Test field of the recent oils designate that they have good performance. In the next step, different blends of HAB as major component and polyisobutene (PIB) as minor component have successfully been employed in the formulation of several ISO grade hydraulic fluids.

Applications:

HAB is another side product in the alkylation reaction process, which is used as an additive to industrial oils.

PROPERTY	UNIT	TEST METHOD	SPECIFICATION
HAB	Wt%	Uop-696	80 min
IBP	°C	ASTM-D1160	310 min
FBP	°C	ASTM-D1160	550 max
WATER	ppm	ASTM-D6304	100 max
Density at (15.6 °C)	gr/cm3	ASTM D4052	0.895 max
COLOUR	SYB	ASTM-D1500	2 max
Viscosity at 40 °C	Mm2/s	ASTM D88	15 min
Doctor Test	---	ASTM D484	Negative
Apperance	---	---	Semi light yellow to light brown
Flash Point	°C	ASTM D93	170 min
Refractive.index(20°C)	°C	ASTM D1218	1.485-1.500