

RESTRICTED

SUMMARY

This report records and summarizes technical information, obtained by U.S. Naval Technical Mission in Europe investigators, on the quantity, quality, composition, and manufacture of German lubricants during the past war years.

Figures for the quantities of oils produced from all sources are presented. The properties and specifications of some of the important commercial lubricants are discussed.

The methods by which lubricating oils are produced from petroleum are outlined, and the several processes that were in use for producing synthetic oils are described. The manufacture and application of a new synthetic lubricating oil component are described.

The preparation and use of several new additives are outlined. The position of lubricating grease manufacture is covered briefly.

An appendix describes the manufacture of ethylene, the raw material for one of the synthetic oils.

There have been transmitted to the Bureau of Ships several German documents which will serve to elaborate in more detail some of the subjects covered herein.

Samples of the most promising new oils and additives were obtained and forwarded to the Naval Research Laboratory at Anacostia, D. C.