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MISCELLANEOUS CHEMICAL WARFARE

INFORMATION. I.G. Leverkusen.

27 April 1945.

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MISCELLANEOUS CHEMICAL WARFARE INFORMATION

I. G. LEVERKUSEN

27 April 1945

Reported by

M. F. FOGLER
U. S. CIVILIAN
CWS HQ. ETOUSA

12 May 1945

CIOS Black List Item - 8
Chemical Warfare

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MISCELLANEOUS CHEMICAL WARFARE INFORMATION

I. G. LEVERKUSEN

1. INTRODUCTION.

The following items were briefly discussed with Dr. Klebert at Leverkusen.

a. Thionylchloride (SOCl₂).

The I. G. at Leverkusen shipped SOCl₂ to Ammendorf (between Halle and Merseburg) for manufacture of poison gas. Ammendorf was said to have been a station for gas manufacture during war of 1914-18. The capacity of the SOCl₂ plant at Leverkusen is 140 tons per month and up to 90 tons per month were shipped to Ammendorf. Shipments to Ammendorf during war years were as follows:

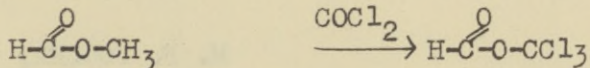
1938	21 tons	1942	600 tons
1939	170 "	1943	700 "
1940	440 "	1944	220 "
1941	645 "	1945	----

b. Protection Against CNCl.

Considerable research work was done at Leverkusen in an attempt to find a satisfactory agent for use in gas mask canisters against CNCl. General method of approach in experiments was to seal CNCl in ampoules with various agents and analyze for CNCl decomposition after a time. The work was said to have produced no worthwhile results.

c. Tear Gas.

Work was done on process for a tear gas, HCOOCCl₃ by action of phosgene on methyl formate. The phosgene presumably acted as a chlorinating agent.



It was stated that this lachrimator was well known and that none had been produced at Leverkusen during the war.

d. Artificial Fog and Its Production.

The I.G. at Leverkusen developed an apparatus used exclusively for shore installations by the German Navy for producing fogs from mixtures of SO_3 and ClSO_2H . The proportions of the ingredients varied with the seasons and were as follows:

	<u>Summer</u>	<u>Winter</u>
SO_3	50%	40%
ClSO_2H	50%	60%

The apparatus was manufactured by various small firms to drawings and specifications developed at Leverkusen. Prints are available at Leverkusen.

Leverkusen produced the $\text{SO}_3\text{-ClHSO}_3$ mixture for the Navy. The capacity was about 750 T per month and production for the Navy during the last several years has been as follows:

<u>Year</u>	<u>Tons</u>	<u>Year</u>	<u>Tons</u>
1939	111	1943	6513
1940	0	1944	5400
1941	0	1945	155
1942	1811	Total (circa)	14,000

e. Colored Smokes.

Considerable work was done at Leverkusen under the general direction of Dr. Klebert on inorganic colored smokes. No tangible results were obtained and none were manufactured. The purpose of the smokes was for use in signal corps of German Army.

f. Titanium Smokes.

TiCl_4 was a product of Leverkusen and was made up to a number of formulae for smoke screens. This plant was put out of operation by bombing late in October, 1944.

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