

**M e m o r a n d u m****440.0440**

To: Mr. J. C. Ingle

Sacramento  
May 31, 1957

From: E. H. Stetson (GAT)

Subject: U--- P--- D--- W---  
XXXX --- --- Avenue  
--- --- XX, California

Account -- - XXXXX

We have been asked whether certain chemicals, used in dyeing cloth, become incorporated in the dyed material or whether they are consumed by the dyer.

The chemicals in question are known as Emulphor, Katanol, Orthodichlorobenzene and Triton 770 Concentrate.

Regarding use of these chemicals, the dyer states:

“RE: Orthodichlorobenzene, Emulphor, Triton 770

“Dyings made on Dacron do not show any washfastness whatever. To make clothes containing Dacron fiber fit into our Unidye (washfast) program it is necessary to dye with a carrier.

“Carriers as a class are in general emulsified aromatic esters and as such are able to act as the link between the dyestuff molecule itself and the fiber.

“The carrier we use is emulsified orthodichlorobenzene which is prepared by emulsifying orthodichlorobenzene with emulphor and Triton 770. This emulsion is referred to in our company but not in the general trade as dye assist.

RE: Katanol

“Katanol combines with the silk fiber in mixed materials causing a crossdye (tweed) effect to appear in the finished goods.”

The Handbook of Material Trade Names, 1953 ed., Zimmerman & Lavine, at page 209, describes Emulphor as “A group of non-ionic water soluble polyethylene ethers of fatty acids or

Mr. J. C. Ingle  
Re: U--- P--- D--- W---  
Account -- - XXXXX

-2-

May 31, 1957

440.0440

alcohol. They are stable to salts, acids and alkalies. Uses: For emulsifying oils, fats, and waxes, and as dispersing and stabilizing agents.”

In the 1952 Technical Manual and Yearbook of the American Association of Textile Chemists and Colorists, Vol XXVIII, Emulphor is listed as a dispersing agent (p. 275), dyeing assistant (p. 277), and as an emulsifying agent (p.278).

In the handbook of Material Trade Names, at page 311, Katanol is described as “solubilized sulfur-containing phenol condensates. Uses: As a mordant for basic dyes and acid dyes, and as a reserving agent for wool in union dyeing.” In the classification section it is listed as a dyeing assistant (p. 665) and as a mordant (p. 687).

Regarding Katanol, the Encyclopedia Britannica, Vol 7, page 792, states, “In the dyeing of basic colours, tannic acid may be substituted by Katanol (a phenolic compound containing sulfur) which can be applied to Alkaline solution and in the presence of sale.”

Orthodichlorobenzene is listed in the Technical Manual, at page 334, as a “solvent for tars, grease, oils, fats, etc.  $O-C_6H_4CL_2$ ”.

The Handbook, at page 581, describes Triton as “a line of wetting, emulsifying, dispersing and scouring agents”. It is listed as a dispersing agent (p. 664), emulsifying agent (p. 667) and wetting agent (p. 721). The Technical Manual lists uses of Triton 770 Concentrate as for “wetting; penetrating; emulsifying; kier boiling; peroxide bleaching – Alkylaryl polyether sulfate.”

On the basis of the descriptions in the Handbook and Technical Manual, it would appear that orthodichlorobenzene, Triton 770 Concentrate and Emulphor are used as solvents in dyeing and, therefore, are consumed by the taxpayer.

It is not clear how Katanol is used. The chemist with whom we have consulted is of the opinion that it is probably used as a solvent. However, if it is used as a mordant, then it becomes part of the dyed material.

We would recommend denial of the petition, unless taxpayer submits additional information regarding the functions of the chemicals in question, either from his chemist or from his suppliers.

GAT:rc