29.08 - Halogenated, sulphonated, nitrated or nitrosated derivatives of phenols or phenol-alcohols.

- Derivatives containing only halogen substituents and their salts :

2908.11 - - Pentachlorophenol (ISO)

2908.19 - - Other

- Other :

2908.91 - - Dinoseb (ISO) and its salts

2908.92 - - 4,6-Dinitro-*o*-cresol (DNOC (ISO)) and its salts

2908.99 - - Other

These are derived from phenols and phenol-alcohols by replacing one or more hydrogen atoms by a halogen, a sulpho group ($-SO_3H$), a nitro group ($-NO_2$), a nitroso group (-NO) or by any combination thereof.

(A) HALOGENATED DERIVATIVES

(1) *o*-**Chlorophenol**. Liquid with a strong odour.

(2) *m*-**Chlorophenol**. Colourless crystals.

(3) *p*-**Chlorophenol**. Crystalline mass with a disagreeable odour.

The three products above are used in organic synthesis (e.g., dyes).

(4) *p*-**Chloro-*m*-cresol** (4-chloro-3-methylphenol). An odourless, disinfectant product, slightly soluble in water but easily emulsified with soap.

(5) **Chlorohydroquinone** (chloroquinol).

(B) SULPHONATED DERIVATIVES

(1) **Phenolsulphonic acids** ($HOC_6H_4SO_3H$), obtained by sulphonating phenol.

(2) **Naphtholsulphonic acids**, prepared by direct sulphonation of naphthols, or by other processes of synthesis. They constitute an extensive group of compounds used for the manufacture of dyes and include :

(a) **1-Naphthol-4-sulphonic acid** (Neville-Winther acid), brilliant transparent flakes or yellowish-white powder.

(b) **2-Naphthol-6-sulphonic acid** (Schaeffer acid), a pinkish-white powder.

(c) **2-Naphthol-7-sulphonic acid** (F acid), white powder.

(d) **1-Naphthol-5-sulphonic acid**, deliquescent crystals.

(e) **2-Naphthol-8-sulphonic acid** (crocein acid), yellowish-white powder.

(C) NITRATED DERIVATIVES

(1) *o*-, *m*- and *p*-**Nitrophenols** ($HOC_6H_4NO_2$). Yellowish crystals; used for preparing organic dyestuffs and pharmaceutical products.

(2) **Dinitrophenols** ($HOC_6H_3(NO_2)_2$). These are crystalline powders; used for the preparation of explosives, sulphur dyes, etc.

(3) **Trinitrophenol (picric acid)** ($HOC_6H_2(NO_2)_3$). Brilliant yellow crystals, odourless and toxic. Used for the treatment of burns and also as an explosive; its salts are known as picrates.

(4) **Dinitro-*o*-cresols**.

(5) **Trinitroxylenols**.

(D) NITROSATED DERIVATIVES

(1) *o*-, *m*- and *p*-**Nitrosophenols**. The fact that nitrosophenols may react in the tautomeric form of quinone oximes does not affect their classification in this heading.

(2) **Nitrosonaphthols**.