## **Quality standards**

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# **Oily Phenol Injection**

**General Notices** 

#### **DEFINITION**

Oily Phenol Injection is a sterile solution containing 5% w/v of Phenol in a suitable fixed oil.

The injection complies with the requirements stated under Parenteral Preparations and with the following requirements.

# Content of phenol, C<sub>6</sub>H<sub>6</sub>O

4.75 to 5.25% w/v.

## **ASSAY**

Dissolve 8 g in 50 mL of <u>ether</u> and extract with successive 10 mL quantities of  $2 \text{M} \, \underline{\text{sodium hydroxide}}$  until extraction is complete, boil the combined extracts for 2 minutes, cool and dilute to 250 mL with  $\underline{\text{water}}$ . To 20 mL of this solution in a glass-stoppered flask add 30 mL of  $\underline{\text{0.05M bromine VS}}$  and 6 mL of  $\underline{\text{hydrochloric acid}}$ , stopper, shake repeatedly during 15 minutes and allow to stand for a further 15 minutes. Add 30 mL of  $\underline{\text{dilute potassium iodide solution}}$ , taking care to avoid loss of bromine, and titrate the liberated iodine with 0.1 m  $\underline{\text{sodium thiosulfate VS}}$ . Repeat the operation without the injection. The difference between the titrations represents the amount of bromine required. Each mL of  $\underline{\text{0.05M bromine VS}}$  is equivalent to 1.569 mg of  $C_6H_6O$ . Determine the  $\underline{\text{weight per mL}}$ ,  $\underline{\text{Appendix V G}}$ , and calculate the percentage w/v of  $C_6H_6O$ .