Polyoxyl 40 Hydrogenated Castor Oil

» Polyoxyl 40 Hydrogenated Castor Oil contains mainly the tri-hydroxystearate ester of ethoxylated glycerol, with smaller amounts of polyethylene glycol tri-hydroxystearate and of the corresponding free glycols. It results from the reaction of glycerol tri-hydroxystearate with about 40 to 45 moles of ethylene oxide.

Packaging and storage— Preserve in tight containers.

Identification—

A: Dissolve about 0.1 g in 1 mL of water, add 9 mL of sodium chloride solution (1 in 20), and heat in a water bath: the solution becomes turbid at a temperature between 70° and 85°.

B: Dissolve about 0.1 g in 10 mL of alcoholic potassium hydroxide TS, boil for about 3 minutes, and evaporate to dryness. Mix the residue with 5 mL of water: it dissolves, yielding a clear solution. Add a few drops of glacial acetic acid: a white precipitate is formed.

Congealing temperature ⟨ 651 ⟩ : between 16° and 26°.

Acid value ⟨ 401 ⟩ : not more than 2.0.

Hydroxyl value ⟨ 401 ⟩ : between 60 and 80.

Iodine value ⟨ 401 ⟩ : not more than 2.0.

Saponification value ⟨ 401 ⟩ : between 45 and 69.

Water, *Method I* ⟨ 921 ⟩ : not more than 3.0%.

Residue on ignition ⟨ 281 ⟩ : not more than 0.3%.

Heavy metals, *Method II* ⟨ 231 ⟩ : 0.001%.

Organic volatile impurities, *Method I* ⟨ 467 ⟩ : meets the requirements.

Residual solvents ⟨ 467 ⟩ **:** meets the requirements.
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