15 Handling Precautions

Observe normal precautions appropriate to the circumstances and quantity of material handled. Spillages of this material are very slippery and should be covered with an inert absorbent material prior to disposal.

Cottonseed oil is a combustible liquid when exposed to heat or flame. If it is allowed to impregnate rags or oily waste, there is a risk due to spontaneous heating. Dry chemicals such as carbon dioxide should be used to fight any fires.

Gloves, eye protection, respirator, and other protective clothing are recommended.

16 Regulatory Status

Included in the FDA Inactive Ingredients Database (IM injections; oral, capsule, tablet and sublingual preparations). Included in the Canadian Natural Health Products Ingredients Database.

17 Related Substances

Almond oil; canola oil; corn oil; hydrogenated vegetable oil; peanut oil; sesame oil; soybean oil; sunflower oil.

18 Comments

The USP 40–NF 35 S1, PhEur 9.2, and BP 2017 also list hydrogenated cottonseed oil.

Cottonseed oil has been used as an adjuvant in cholecystography and as a pediculicide and acaricide. It has the nutritive and emollient properties of fixed vegetable oils. By virtue of its high content of unsaturated acid glycerides (especially linoleic acid), it is used for dietary control of blood cholesterol levels in the prophylaxis and treatment of atherosclerosis. It can also retard gastric secretion and motility, and increase caloric intake.

Cottonseed oil has also been used in the manufacture of soaps, oleomargarine, lard substitutes, glycerin, lubricants, and cosmetics.

Gossypol, a natural toxin in cottonseed, interferes with spermatogenesis and is also a causative factor for paralysis among men. It can increase high-density lipoproteins in the body leading to cardiovascular diseases such as artherosclerosis, heart attack and angina. It may also lead to deficiency of omega-3 essential fatty acid. In a dose of 30 mL or more it is used as a mild cathartic.

A specification for unhydrogenated cottonseed oil is contained in the *Food Chemicals Codex* (FCC)[9] and the *Japanese Pharmaceutical Excipients* (JPE).[10]

The EINECS number for cottonseed oil is 232-280-7.

19 Specific References

1 Jozwiakowski MJ, *et al.* Characterization of a hot-melt fluid bed coating process for fine granules. *Pharm Res* 1990; 7: 1119–1126.
2 ScienceLab.com. Material safety data sheet: Cottonseed oil, May 2013.
3 McNiff BL. Clinical use of 10% soybean oil emulsion. *Am J Hosp Pharm* 1977; 34: 1080–1086.
4 Cole WH. Fat emulsion for intravenous use. *J Am Med Assoc* 1958; 166: 1042–1043.
5 Goulon M, *et al.* Fat embolism after repeated perfusion of lipid emulsion. *Nouv Presse Med* 1974; 3: 13–18.
6 Davis SS. Pharmaceutical aspects of intravenous fat emulsions. *J Hosp Pharm* 1974; 32: 149–160165–171.
7 Singh M, Ravin LJ. Parenteral emulsions as drug carrier systems. *J Parenter Sci Technol* 1986; 41: 34–41.
8 Amato P, Quercia RA. Historical perspective and review of the safety of lipid emulsion in pregnancy. *Nutr Clin Prac* 1991; 6(5): 189–192.
9 *Food Chemicals Codex*. [online] Bethesda, MD: United States Pharmacopeia. http://publications.usp.org (accessed 31 March 2017).
10 Japan Pharmaceutical Excipients Council. *Japanese Pharmaceutical Excipients 2004*. Tokyo: Yakuji Nippo, 2004: 191.

20 General References

—

21 Author

KS Alexander.

22 Date of Revision

4 May 2017.

Cresol

1 Nonproprietary Names

BP: Cresol
JP: Cresol
USP–NF: Cresol

2 Synonyms

Cresylic acid; cresylol; hydroxytoluene; tricresol.

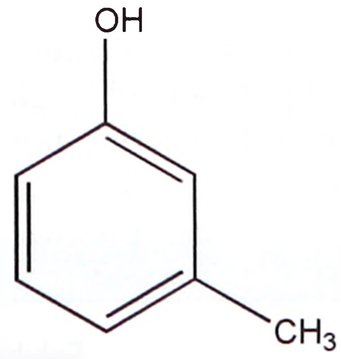
3 Chemical Name and CAS Registry Number

Methylphenol [1319-77-3]

4 Empirical Formula and Molecular Weight

C_7H_8O 108.14

5 Structural Formula



m-Cresol

6 Functional Category

Antimicrobial preservative.