

Picric acid
C₆H₃N₃O₇
[CAS No. 88-89-1]

Occupational sensitizer: Skin, Group 2

Synonym: 2,4,6-trinitrophenol

Summary of classification

Picric acid is used as an explosive, raw material for pesticides and dyes, and reactive reagent in chemical analysis. An epidemiological study¹⁾ found that explosive production workers developed dermatitis in the area contacted by dust including picric ammonium and that the dermatitis disappeared after discontinuance of contact. Two reports^{2,3)} describing patients with contact dermatitis caused by picric acid-containing rubs indicated that the patients were positive for picric acid in a patch test conducted after they

were cured. Consequently, picric acid is classified as a Group 2 substance that probably induces an allergic dermal reaction in humans.

Year of Proposal: 2014

References

- 1) Sunderman FW, Weidman FD, Batson OV. Studies of the effects on ammonium picrate on man and certain experimental animals. *J Ind Hyg Toxicol* 1945; 27: 241–8.
- 2) Aguirre A, Sanz de Galdeano C, Oleaga JM, Eizaguirre X, Diaz Perez JL. Allergic contact dermatitis from picric acid. *Contact Dermatitis*. 1993; 28: 291.
- 3) Serra-Baldrich E, Camarasa JG. Allergic contact dermatitis from picric acid. *Contact Dermatitis* 1991; 25: 127.