

## Menthol Crystals

Dispensed by weight. Menthol Crystals, botanical name *Mentha arvensis*, steam distilled. These are clear, colorless, needle-like crystals with odor resembling that of peppermint which are soluble in alcohol, essential oils and olive oil but almost insoluble in water and glycerin. Melting point 41°C to 44°C (105.8°F to 111.2°F), boils at 212°C (413.6°F). Menthol crystals start to evaporate at 21°C (70°F). The crystals contains not less than 99.4% menthol. Menthol is the chief constituent of peppermint oil and is responsible for its odor and taste and the "cooling sensation" when applied to the skin and mucosal surfaces. *Mentha piperita* contains up to 50% menthol and *Mentha arvensis* contains 70-80% menthol. Menthol should be kept in a cool place in well-stoppered bottles. Menthol is the solid constituent of oil of peppermint, to which its characteristic odor is due, and was formerly known as peppermint camphor. Menthol is obtained by subjecting the distilled oil of peppermint to a temperature of -22° C, (-7.6° F.) by the aid of a freezing mixture. The menthol crystallizes out in satiny crystals and the mother liquor is removed while the low temperature is maintained. Menthol and its derivatives can also be added to various peppermint type compositions to enhance the cooling and freshening effects. Menthol is used in pharmaceutical, confectionery and flavoring industries. In ointments, liniments, and solutions menthol crystals are employed in strengths ranging from 5 to 20 per cent. The crystals are commonly applied to cosmetics, salves and balms, which are created to assist in coughs, congestion, upper respiratory problems, and the flu. Menthol crystals are great inhalants by themselves and are easily combined into recipes. Add several drops to a bowl of hot, steamy water and carefully inhale the soothing vapors through the mouth and nose for stuffiness and bronchitis. Use a few drops on the tiles of the walls surrounding your shower (not on the floor!) and the menthol will be released by the steam created by the hot water. Externally, it is employed as a local analgesic. Diluted and rubbed on the skin, it produces a sensation of cold, followed by numbness and partial anesthesia; it first stimulates the nerves, conveying the sensation of cold, and later penetrates the skin and paralyzes the nerve endings. Known ingredients of Vicks VapoRub: Camphor, menthol, eucalyptus, cedarleaf, nutmeg, thymol and turpentine.