

TECHNICAL BULLETIN



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D-LIMONENE SUPER SOLVENT

MATERIAL & FUNCTION

Limonene is a [hydrocarbon](#), classed as a [terpene](#). It is a colourless liquid at room temperatures with an extremely strong smell of [oranges](#). It takes its name from the [lemon](#), as the rind of the lemon, like other [citrus](#) fruits, contains considerable amounts of this chemical compound, which is responsible for much of their smell. The principal industrial source, citrus fruit, contains D-limonene ((+)-limonene), which is the (R)-[enantiomer](#) ([CAS number](#) 5989-27-5, [EINECS number](#) 227-813-5). Synthetic limonene (an equal mixture of (+) and (-) limonene) is known as dipentene

APPLICATIONS

As a straight solvent, d-Limonene can replace a wide variety of products, including mineral spirits, methyl ethyl ketone, acetone, toluene, glycol ethers, and of course fluorinated and chlorinated organic solvents. As with most organic solvents, d-Limonene is not water soluble, so it can be used in the typical water separation units. With a KB value of 67, d-Limonene has solubility properties close to that of CFC's, indicating that it is a much better solvent than a typical mineral spirit. Straight d-Limonene can be used as a wipe cleaner, in a dip bath, or in spray systems as a direct substitute for most other organic solvents.

By combining d-Limonene with a surfactant package, a water diluting and rinsible solution can be made. In most cases these products are used in the institutional and household settings in place of caustic and other water based cleaners. A concentrated solution of a d-Limonene/surfactant solution can be made to be diluted before use, or pre-diluted solutions can be formed. The use concentrations of d-Limonene in these situations are usually 5-15%. In general these solutions are used as spray and wipe cleaners. The water dilutable solutions can also be used in industrial settings where a water rinse of the parts is desired to remove any residue which may remain.

d-Limonene is a very versatile chemical which can be used in a wide variety of applications. It is extremely safe and more effective than typical cleaning solutions.

DIRECTION FOR USE

CAUTION

Avoid contact with skin and eyes and avoid breathing vapour or spray mist.

Limonene and its oxidation products are skin irritants, and limonene-1,2-oxide (formed by aerial oxidation) is a known skin sensitizer. Most reported cases of irritation have involved long-term industrial exposure to the pure compound. It is not a carcinogen.

PACKAGING

20 Litre & 200 Litre containers

IMPORTANT NOTICE TO CUSTOMER

Since the use of this product is beyond the control of either seller or manufacturer, their only obligation shall be to replace any quantity of product which is proven defective. They cannot assume any risk or liability in excess of the purchase price of the product itself, which does not include labour or any consequential damages resulting from the use of this product. Determining the suitability of this product for any intended use shall be solely the responsibility of the user. ALWAYS TEST FIRST.