



NEW ZEALAND MADE FOR THE TRADE

Brake Cleaner is a chemical product specifically formulated to do a specific job.

Brake Cleaner is an aerosol-delivered solvent designed to clean grease, oil, brake fluid, dust and dirt from brake pads, without disassembly.

There are other chemicals that can be used for cleaning, but many leave behind a residue that can contaminate linings and attack rubbers.

Brake Cleaners contain a variety of ingredients. Many have been reformulated to make them more environmentally friendly. For years, 1-1-1 trichloroethane was the primary ingredient used in most aerosol brake cleaners. It worked great, dried almost instantly, left no residue and was non-flammable. It is an ozone-depleting chemical like CFC's, and in most Western countries including Australia and New Zealand, 1-1-1 trichloroethane has been totally banned in all uses.

All cleaners have eliminated 1-1-1 trichloroethane altogether and now use other chemicals.

Water Based Cleaners

Other alternatives are water based brake cleaners. These typically contain a citrus based solvent and other ingredient such as glycol ethers. The primary advantages with water based formula are non-flammability, low toxicity and biodegradability of the base product.

Water based products clean more slowly and may require scrubbing or wiping to do a thorough job. Drying times are extremely slow and take hours rather than minutes or seconds.

They are difficult to get residue free and will create water waste that needs to be disposed of.

Chlorinated Cleaners

Perchloroethylene is a chemical used by dry cleaners because of its excellent cleaning properties. It dries fast, leaves no residue and is non-flammable.

Chemz Z7 Brakeclean uses perchloroethylene blended with various petroleum distillates that have low toxicity levels.

Non-Chlorinated Cleaners

International regulatory changes were intended to reduce chlorinated chemical use. Some cleaners use non-chlorinated formulas, including n-methyl pyrrolidone, acetone, methanol, alcohol, toluene and various petroleum distillates. Many of these alternatives include toxic organic chemicals such as toluene and methanol that are not much safer to human health than the chlorinated solvents. Some of these solvents also contain high levels of n-hexane which can cause nerve damage with repeated long term exposures.

Most non-chlorinated brake cleaners do not clean as well as perchloroethylene based formulas nor do they dry as fast. Non chlorinated brake cleaners are usually flammable. Most products imported from the USA & Australia use this type of formula.

European Non-Chlorinated Cleaners

European type non-chlorinated formulas typically contain highly refined petroleum distillates due to the regulations that apply to this type of product. These chemicals are non CFC's. The petroleum distillates used in these products have very low levels of aromatics and n-hexane and are regarded as being practically non-toxic and are regarded as having very low toxicity or being practically non-toxic.

Chemz Rapid Brake Cleaner is a next generation non-chlorinated formula, based on the European type and uses specially refined petroleum solvents with very low levels of n-hexane and no aromatic solvents for increased worker safety.