
Technical Information

RENITE D-5-A SHEAR SPRAY CONCENTRATE

Renite D-5-A is a graphite-free water-soluble, water-dilutable concentrate for spray lubrication of shears.

- Composition:** Blend of select oils and biodegradable emulsifiers.
Appearance: Brownish-yellow, light oil. Product disperses when stirred into water to form a milky, white emulsion.
Specific Gravity: ca. 0.92 (g/mL)
Flash Point: 330°F (165°C) Minimum; 375°F (191°C) Typical.

USES:

Renite D-5-A, diluted with water, is a lubricant for spray lubrication of shears, serving to keep them moving smoothly, provide cooling, and reduce or eliminate shear marks. The same spray serves to lubricate the delivery system - scoops, troughs, and deflectors - and it does so without excessive tendency to build up, due to a minimum tendency to leave carbon residue.

As is typical of Renite products, it is inexpensive (especially considering the high dilution ratio) but effective. Renite D-5-A is biodegradable when diluted for use and is free of additives (such as preservatives, nitrites, or phosphates) that might be harmful under certain circumstances. Undiluted, it is as stable as an ordinary machine oil and may be stored and handled as such. Diluted material has good stability, and neither it nor the concentrate will gum up in cold weather, unlike typical soluble lard oils sometimes used for this purpose.

APPLICATION:

To dilute, add water and stir, or, for quicker dilution and a more stable emulsion, stir thoroughly with 4 parts of water, then add the mixture to the reservoir tank and pump in the remainder of the water. Water may be hot, cold, hard, or soft. However, if mineral content of the water is high, so that mineral residue on shears is a problem, consider use of softened, demineralized, or rain water. A proportioning pump may be used for mixing if desired. The optimum dilution ratio should be determined by experiment. Typical dilution ratio is 300:1 (water : concentrate), though some plants have used variations ranging from 100:1 to 850:1.

It may be convenient to install a central reservoir tank. A large tank should be provided with a recirculating system or other means of agitation. Agitation is not needed in smaller tanks, on the order of 15 gallons, though they will require brief stirring after any long shutdown. To prevent rancidity in large tanks, run until nearly empty before mixing up fresh material, and occasionally add calcium hypochlorite, or rinse and flush with water containing it in a proportion such as would be used to disinfect a swimming pool, following the directions supplied with the hypochlorite.

For application, we recommend the heat-resistant, all metal Renite E Model atomizers, which deliver a very fine, precisely controlled spray. Also effective and useful for this purpose are Renite SGL-4-34a Extension-Head Atomizers. The latter allow one to position a small nozzle block up close to the shear blade while the valve block can be positioned some 18" (or more) away from the blade. Two such units are required for each set of blades, with tubing connecting the two blocks. Intermittent spray air can be 25-40 p.s.i. (1.75-2.8kg/cm²). A special Fluid Tip and Air Cap in the nozzle block, as well as an easy-adjusting and locking needle valve, allow for minimum or maximum liquid flow. For best results use small ¼" N.P.T. gasoline strainers in each of the two lubricant supply lines so as to prevent future clogging (from pipe scale) in the Renite atomizer fluid tips.