CAL 507

Water shedding liquid for fast drying on metals.

CAL 507 water displacing liquid is a thin, mobile fluid that quickly sheds water from the surface of all metals. It is ideal for use after plating with gold, silver, zinc, cadmium, nickel and other metals except chrome plate to facilitate fast, stain-free drying. It is used extensively for rapid shedding of water from metal after plating, pickling, coloring, cleaning, etching and phosphating to prevent tarnishing, staining, and the deposition of solid particles.

CAL 507 water displacing liquid penetrates into crevices and holes forcing the water from the surface. The entire drying process can be accomplished in less than one minute.

How to use:	Concentration:	Full Strength
	Temperature:	Room
	Time:	10 seconds

OPERATING CONDITIONS:

Prior to immersion in CAL 507 water displacement liquid, parts should be rinsed very thoroughly in running water to make certain that all water soluble materials such as cleaning solutions, soap, films, plating solutions, and acids are dissolved. A simple in and out immersion is not sufficient to remove these films from the surface. Use TWO separate rinses to allow the work to remain in running water for at least 10 SECONDS.

The parts should then be immersed in the CAL 507 water displacing liquid for at least 10 seconds. Large objects may require a longer time to allow the water to reach the bottom of the tank. Gentle back and forth or up and down agitation is helpful. Strong agitation should be avoided as this may cause water to be dispersed in the liquid.

The light residue remaining after CAL 507 water displacing liquid ahs evaporated imparts some rust protection to the metal parts. If the residue is permissible, allow the liquid to evaporate at room temperature. The residue can readily be removed by use of chlorinated degreasing solvents.

For fast stain-free drying, the preferred method is to transfer parts from CAL 507 water displacing liquid directly to the vapor of a vapor degreaser. Remove the parts slowly from the vapor degreaser; fast withdrawal of the parts, particularly brass, from chlorinated solvent vapors may leave drops of vapor on the parts that will cause tarnishing. CAL 507 water displacing

residues can be flushed off by means of other solvents such as safety naphtha or trichloroethylene.

INFORMTION ON THE USE OF CHLORINATED SOLVENTS TO REMOVE CAL 507 WATER DISPLACING LIQUID:

CAL 507 water displacing liquid is frequently removed from work by either trichloroethylene or perchlorethlene. The chlorinated solvents will be diluted gradually and when the mixture contains 60% by volume or more of CAL 507 water displacing liquid, the mixture will be inflammable. It is, therefore, best to discard the mixture before this concentration is reached or when a 50% concentration is reached. This concentration can be determined by measuring the boiling point.

It will be noted that as Cal 507 water displacing liquid is dragged into trichloroethylene, the boiling point of the mixture will rise from 188˚ F and when the mixture contains 50% by volume of CAL 507 water displacing liquid and 50% trichloroethylene, the boiling point will be 203˚ F. At that time, the mixture should be discarded.

Similarly for perchlorethylene, the boiling point will rise from 249˚ F to 259˚ F. when 50% by volume concentration each of Cal 597 water displacing liquid and perchlorethylene is reached.

USES FOR CAL 507 WATER DISPLACINT LIQUID:

1. Drying of plated coatings, except chromium, followed by vapor degreasing. The liquid provides a fast, stain-free drying without any film.

2. Drying of absorptive coatings, such as phosphate coatings.

3. Drying of bulk work that nests very closely such as mails, pins, nuts and bolts. CAL 507 water displacing liquid eliminates the need for sawdust drying which may prove to be troublesome especially with threaded parts.

4. Drying of work after cleaning operations.

5. Drying of work that tends to rust. Rusting may occur with thin nickel or copper deposits over cast iron or steel because the plating thickness is not sufficient for protection. The use of CAL 507 water displacing liquid provides rust free drying.

6. Elimination of hard water spots and residues. Highly finished work rinsed with water containing dissolved salts is difficult to dry; this is particularly true in hard water sections of the country. CAL 507 water displacing liquid sheds the water film preventing the formation of solid residue due to the evaporation of water. Many manufacturers have overcome hand wiping of parts by using CAL 597 water displacing liquid.

7. Drying of porous work such as sintered or powdered metallurgical parts or porous cast parts. CAL 507 water displacing liquid penetrates pores to dislodge water and permit stain-free drying.

EQUIPMENT:

CAL 507 water displacing liquid can be contained in plain steel tanks. The tank should be equipped with a drain valve for drawing water off the bottom of the tank.

CAUTION:

CAL 507 water displacing liquid has a fire hazard rating equivalent to that of safety naphtha meeting Stoddard Solvent specifications, with a flash point of approximately 105˚ F. Since CAL 507 water displacing liquid has the solvency of safety naphtha, skin contact should be avoided to prevent de-fatting of the skin.

Avoid contact with the eyes. In the event of such contact, flush with plenty of cold water obtain medical attention.

FOR INDUSTRIAL USE ONLY

CAL-PAC CHEMICAL CO., INC. gives no warranty, express or implied and all products are sold upon condition that purchasers will make their own test to determine the quality and suitability of the products. CAL-PAC CHEMICAL CO., INC. shall in no way be responsible for the proper use and service of the product. Any information or suggestions given are without warranty of any kind and purchasers are solely responsible for any loss arising from the use of such information or suggestions. No information or suggestions given by us shall be deemed to be a recommendation to use any production conflict with existing patent rights.

6231 Maywood Avenue ▪ Huntington Park, CA 90255 ▪ Phone: 323-585-2178 ▪ Fax: 323-585-3087