



PRODUCT: CHEMKLEEN 275

DESCRIPTION

CHEMKLEEN 275 is a liquid, biodegradable cleaner specifically formulated to be used in ultra-high pressure pre-cleaning equipment.

CHEMKLEEN 275 provides efficient cleaning at ambient temperature, and can be used effectively on steel, zinc, zinc alloy, and aluminum surfaces. The unique combination of ingredients in this cleaner provides both a high builder and a high level of detergency, while eliminating the foaming problems often encountered with high pressure cleaning equipment.

APPLICATION

CONCENTRATION	5.0-20.0% BY VOLUME (5-20 GALLONS PER 100 GALLONS OF SOLUTION)
TEMPERATURE	AMBIENT - 120°F
TIME	10-30 SECONDS SPRAY

SOLUTION MAKE-UP

Fill the solution tank approximately 1/2 full with city water. Turn on the mixer or circulating pumps, and slowly add the calculated volume of **CHEMKLEEN 275** to the tank. Add water to bring the tank to operating level, and allow to mix thoroughly. Then check the concentration using the following Control Procedure.

CONTROL PROCEDURES

Free Alkalinity

Using a 25 ml pipette transfer 25 ml of the operating bath into a 150 ml beaker. Add 4-5 drops of INDICATOR #5 (Phenolphthalein) and titrate with TEST SOLUTION #4 (0.1 N H₂SO₄) until the solution changes from pink to colorless. The number of ml of TEST SOLUTION #4 required is recorded as the Free Alkalinity.

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<u>CONCENTRATION (% BY VOLUME)</u>	<u>FREE ALKALINITY</u>
3%	2.7 ml
5%	4.5 ml
10%	9.0 ml
15%	13.5 ml
20%	18 ml

An addition of 1 gallon of **CHEMKLEEN 275** per 100 gallons of solution raises the free alkalinity by 0.9 ml.

Total Alkalinity

Total Alkalinity can be determined by adding 3-4 drops of INDICATOR #2 (Brom Cresol Green) to the same 25 ml sample and continue titrating with TEST SOLUTION #4 until the solution changes color from blue to yellow. The number of ml of TEST SOLUTION #4 (including ml of Free Alkalinity) is recorded as total Alkalinity. However, Free Alkalinity is the preferred control method.

As the cleaner bath is used, the Total Alkalinity will rise, representing a gradual loading of the cleaner bath with contaminants. The Total Alkalinity/Free Alkalinity ratio can therefore be used as an indicator of the proper time to dump and recharge the cleaner tank. There is no definite ratio which is applicable to all systems. Your PPG Chemfil representative will work with you in determining the optimum dump and recharge cycle for your system, based on your own special operating conditions.

PHYSICAL DATA

SPECIFIC GRAVITY	1.10
WEIGHT / US GALLON	9.1#/GALLON
FLASH POINT	NONE
APPEARANCE	CLEAR, YELLOW LIQUID
STABILITY	MODERATELY STABLE, ROTATE STOCK

HANDLING AND STORAGE

The use of chemical goggles and protective gloves is recommended as **CHEMKLEEN 275** may cause irritation to skin and eyes. Avoid inhalation. Store away from strong acids, oxidizers, reducers and metals. Tanks and drums should be vented and diked.