



Product Info Sheet

LF-37

General Description

ArmaKleen™ LF-37 is a specially formulated low temperature, low foaming cleaner. ArmaKleen LF-37 was formulated to provide exceptional cleaning in Spray Washer applications down to 110°F without foaming. LF-37 can also be used in Spray Under Immersion, Agitated Immersion and Ultrasonic parts washers.

The ArmaKleen LF-37 surfactant package was designed to provide strong cleaning performance removing plant-based and petro-based greases and oils at lower cleaning temperatures.

When left on metal surfaces, ArmaKleen LF-37 provides temporary indoor rust protection for steel surfaces, during storage and between operations. The duration of the rust protection is directly related to environmental storage conditions.

ArmaKleen LF-37 complies with the 25 g/L VOC SCAQMD regulations. The concentrate only has 17g/L of VOCs, with the 5% use solution having only 0.85g/L VOCs.

	Benefits
Low Foaming	Will not foam in spray applications as low as 110°F
Versatile	Can be used in spray, ultrasonic and immersion applications
Wide Temperature Range	Can effective clean from 77°F to 160°F
Multi-Metal Safe	Can simultaneously clean steel, aluminum, copper and brass. Does not tarnish or dull cast aluminum parts
Cleaner/Rust Preventative	Cleans metal and provides short term indoor rust protection
Non Flammable	Improves employee safety and eliminates fire hazards
Low VOCs	Concentrate has 17g/L. 5% use solution has 0.85g/L
No phosphates or nitrites	Safer for workers and the environment

Operating Parameters

pH of Concentrate: 10.5
 pH of 5% by volume dilution: 9.2

Equipment Type	LF-37 BCR Concentration	Washer Temperature
Spray Washer	5% by volume	110°F to 160°F
Immersion Washer	5% by volume	77°F to 160°F
Ultrasonic Washer	5% by volume	77°F to 160°F



Product Info Sheet

LF-37

Safety-Kleen Part Numbers

ArmaKleen™ Product (275 Gallon Tote) SK P/N: 6873 (inventory) 6873 (sales)

ArmaKleen™ Product (55 Gallon Drum) SK P/N: 6473 (inventory) 6473 (sales)

ArmaKleen™ Product (5 Gallon Pail) SK P/N: 6373 (inventory) 6373 (sales)

Additives

ArmaKleen M-Defoamer HD SK P/N 6310 (Pints – 8 per case)

ArmaKleen M-RP (for added rust protection) SK P/N 6342 (5-gallon pail)

Soil Compatibility

Baked on carbon, varnish, grease, oil, lubricants, machining fluids, rust preventatives, metal working compounds and other commercial and industrial soils

Substrate Compatibility

Steel, stainless steel, cast iron, aluminum, copper, brass and other alloys

Compliance Information

SDS Information

SK P/N 820476 Concentrate English

SK P/N *Pending* FR Concentrate French

SK P/N 820477 Cleaning Solution English

SK P/N *Pending* FR Cleaning Solution French

Titration Information

AquaPhoenix Titration Kit

SK P/N *pending* Total Alkalinity Titration Kit (order through branch SAP)

Procedure

1. Fill graduated cylinder with 10 mL of ArmaKleen M-100 BCR cleaning solution. The bottom curve of the solution should touch the top of the indicated line.
2. Pour the measured amount of cleaning solution from the graduated cylinder into the Erlenmeyer titration flask. Rinse the cylinder with 5-8 mL of water and transfer it to the same flask.
3. Add 5 drops of Bromocresol Green-Methyl Red Indicator Solution (small dropper bottle) to the flask and mix to produce a blue color. Clean water may be added to dirty solutions to see the color change more clearly. Several more drops of indicator solution may also be added if the solution is excessively dirty.
4. Carefully add 1.0N Sulfuric Acid (square dropper bottle) one drop at a time to the flask, swirling the flask after each drop. Count the number of drops.



Product Info Sheet

LF-37

5. When the solution changes to a greenish brown or tan color you are near the end point. Continue adding and counting the number of drops until the solution turns to a peach or bright pink color and the addition of one more drop does not cause any further color change.
6. Use the titration table to find the cleaner concentration from the number of drops of acid used.
7. Wash the test solution down a sink with water. Rinse the graduated cylinder and mixing flask well before storing in the case.

Cat.# pending Titration Guide Rev.pending

TITRATION TABLE																						
		% CLEANER CONCENTRATION																				
Cleaner	mls	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	25
Sample		DROPS OF ACID REQUIRED FOR COLOR CHANGE																				
LF-37	5	3	5	7	9	10	11	13	15	17	20	22	24	25	27	29	32	35	37	39	40	50

Precautions

Foaming may occur in high pressure (above 60 psi) spray systems or at operating temperatures below 100°F

IMPORTANT: The information presented in this product labeling and literature, while not guaranteed, is true and accurate to the best of our knowledge. No warranty, express or implied, is made regarding performance, stability or otherwise. Such information is not intended to be all-inclusive, and the manner and conditions of particular uses may involve other or additional preparatory, performance or safety considerations. While our technical personnel will be happy to respond to questions, safe, effective handling and use remains the responsibility of the user.