



STEPOSOL® CITRI-MET

A Breakthrough in Cleaning Technology

REVOLUTIONARY TECHNOLOGY THAT DELIVERS CLEAN AND GREEN.
EASILY WIPE AWAY TOUGH SOILS FOR BREAKTHROUGH CLEANING.
JUST DILUTE WITH WATER TO MEET YOUR NEEDS.

STEPOSOL® CITRI-MET covers a wide range of applications, from household to industrial to institutional. Dilutions can produce products for the home market that clean glass, carpet and multiple surfaces, and remove stains left by permanent markers. More concentrated solutions produce products for the industrial market that clean metal parts, remove crude oil stains, wash oil field rigs, and strip latex.

GENERAL GUIDELINES

It is recommended to start with a more dilute system and increase concentration if needed to achieve the minimum dilution required for cleaning. Some surfaces are more sensitive to high concentrations, such as porous materials, rubber, latex, and coated surfaces. Dilutions of 1:14 and greater are safe for most surfaces. Using a higher concentration can reduce the dwell time needed for easy soil removal. STEPOSOL® CITRI-MET is not compatible with hypochlorite bleach. It is recommended to formulate between pH 10-12. STEPOSOL® CITRI-MET may not be effective below pH10 and is not stable above pH 12.

Water hardness

For consumer products, the manufacturer should dilute STEPOSOL® CITRI-MET using deionized water or soft water (<17 ppm) to ensure the best clarity. For industrial use, on-site water can be used. Hard water may produce haze, but will not affect cleaning performance.

Preservative

STEPOSOL® CITRI-MET as manufactured and sold by Stepan is self-preserved. Since equipment and water quality used for dilution can potentially introduce additional microbial challenges, it is the responsibility of the manufacturer to confirm adequate antimicrobial preservation.

Cloud Point

The solution will become hazy at temperatures above the cloud point, but will fully recover clarity when below the cloud point. Concentrations of 1:2 and greater have a cloud point greater than 70 °C .

HOUSEHOLD CLEANING

Glass Cleaner

Dilution: 1:100
Water added: 99%
Water present: 99.36%

Cloud point: 33 °C
VOC: 0.07%*

Notes: This use level leaves minimal residue, which is ideal for glass surfaces. Wipe to complete dryness.

Multi-purpose Cleaner

Dilution: 1:32
Water added: 96.96%
Water present: 98.05%

Cloud point: ~37 °C
VOC: 0.23%*

Notes: This use level leaves minimal residue, which is ideal for stainless steel appliances, stone countertops, and plastic surfaces. Wallboards are sensitive to higher concentrations, excess rubbing, and long dwell time. Use caution on latex painted surfaces.

Floor Cleaner

Dilution: 1:100
Water added: 99%
Water present: 99.36%

Cloud point: 33 °C
VOC: 0.07%*

Notes: This use level leaves minimal residue, which is ideal for lightly soiled tile and wood flooring.

HOW TO USE DILUTION GUIDE



HOUSEHOLD CLEANING

Kitchen Degreaser

Dilution: 1:32 Cloud point: ~37 °C
Water added: 96.96% VOC: 0.23%*
Water present: 98.05%

Notes: This use level works on moderately/oily soiled surfaces such as a stove top.

Laundry Pretreater

Dilution: 1:14 Cloud point: 44 °C
Water added: 93.33% VOC: 0.5%*
Water present: 95.73%

Notes: This use level is ideal for removing blood and other stains from cotton and most fabric types. Fabric must be rinsed after treatment for best results.

Carpet/Upholstery Cleaner

Dilution: 1:14 Cloud point: 44 °C
Water added: 93.33% VOC: 0.5%*
Water present: 95.73%

Notes: This use level is ideal for removing dirt, coffee, wine, grass, blood, ink, and pet stains. Dab surface with a damp cloth after treatment. Higher concentrations may produce too much foam for cleaning carpets and may damage vinyl chairs.

Permanent Ink/Marker Remover

Dilution: 1:14 Cloud point: 44 °C
Water added: 93.33% VOC: 0.5%*
Water present: 95.73%

Notes: This use level is ideal for removing permanent ink without damaging the coating on the surface. Wipe surface to complete dryness. Stains on porous surfaces may require longer dwell time to remove deep layers of ink. Removing these penetrated stains may have adverse affects on the surface.

Vehicle Bug/Tar Cleaner

Dilution: 1:14 Cloud point: 44 °C
Water added: 93.33% VOC: 0.5%*
Water present: 95.73%

Notes: This use level is ideal for removing bug and tar from vehicles. Higher concentrations may damage windshield wipers and automotive surface. Wipe surface to complete dryness. For general washing of an automobile, use a 1:30 dilution or greater to meet the CARB VOC requirement*.

Oven/Grill Cleaner

Dilution: 1:4 Cloud point: 70 °C
Water added: 80% VOC: 1.5%*
Water present: 87.20%

Notes: This use level works on baked on foods. A dwell time between 30 minutes and two hours is needed for easy removal. To boost performance and reduce dwell time, Monoethanolamine or sodium metasilicate can be added up to pH 12.

INDUSTRIAL CLEANING

Concentration needed for removal can vary depending on the surface type and thickness of the coating. At high concentrations required for industrial cleaning, foam may generate in processes that utilize agitation or mechanical action.

Metal Cleaner

Dilution: 1:14 Cloud point: 44 °C
Water added: 93.33% VOC: 0.5%*
Water present: 95.73%

Notes: This is the target use level to remove oils/lubricants from metal such as stainless steel. Due to smooth surfaces a relatively short dwell time is required.

Oilfield Equipment Cleaner

Dilution: 1:4 Cloud point: 70 °C
Water added: 80% VOC: 1.5%
Water present: 87.20%

Notes: This is the target use level to remove crude-oil/tar stains from oilfield rigs and other surfaces. Increase dwell time and concentration for heavy baked on soil. For thick coatings, porous surfaces, or to reduce dwell time, use a dilution between 1:2 and 1:4. For thin coatings use a dilution between 1:4 and 1:14.

Graffiti/Latex Paint Remover

Dilution: 1:4 Cloud point: 70 °C
Water added: 80% VOC: 1.5%*
Water present: 87.20%

Notes: This is the target use level for removing graffiti and latex. For thick coatings, porous surfaces, or to reduce dwell time, use a dilution between 1:2 and 1:4. For thin coatings, smooth surfaces, or to increase dwell time, use a dilution between 1:4 and 1:14.

Adhesive Remover

Dilution: 1:4 Cloud point: 70 °C
Water added: 80% VOC: 1.5%*
Water present: 87.20%

Notes: This is the target use level for removing adhesive. For thick coatings, porous surfaces, or to reduce dwell time, use a dilution between 1:2 and 1:4. For thin coatings, smooth surfaces, or to increase dwell time, use a dilution between 1:4 and 1:14.

*The dilution level for the specific application noted is VOC-compliant with California Air Resource Board (CARB) for consumer products. The VOCs noted on this document are calculated values.

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August 2015