Navigating Safer Choice

Stepan’s CleanGredients®
Product & Formulation Guide
What is Safer Choice?
The United States Environmental Protection Agency’s (EPA) Safer Choice Program is one of the EPA’s premier partnership programs, working with industry sectors to compare and improve the human health and environmental risks, as well as the performance and cost of existing and alternative products, processes and practices. For more information visit www.epa.gov/saferchoice.

What is CleanGredients®?
CleanGredients® is an online database of chemical product ingredients that are used primarily to formulate household, institutional, and industrial cleaning products that have been pre-approved to meet the U.S. EPA’s Safer Choice Standard. CleanGredients® is a resource for formulators who are seeking chemical ingredients that will help them to obtain the Safer Choice label in a manner that reduces risk to their business, saves them money and gets their products to market faster. For more information visit www.cleangredients.org.

What does the EPA’s Safer Choice label on a product signify?
The label signifies that the Safer Choice review team has screened each ingredient in the product for potential human health and environmental effects and that—based on currently available information, predictive models, and expert judgment—the product contains only those ingredients that pose the least concern among chemicals in their class.

How does Stepan support the U.S. EPA Safer Choice Program?
Stepan was a key stakeholder in the development of the first ingredient screen for surfactants in association with the development of the CleanGredients database. In 2006, Stepan listed its first five ingredients. Since 2006, Stepan has listed over 30 surfactants approved for those customers seeking Safer Choice certification. Stepan upholds the U.S. EPA Safer Choice Program’s mission to help safeguard human and environment health through the use of safer chemistry. The program involves an independent, third-party technical review as well as a U.S. EPA review of both ingredients and end use products against an established and publicly-available standard. As the EPA’s website notes, "The Safer Choice label, backed by the scientific expertise and experience of EPA, provides the assurance many consumers seek. Companies that have invested in safer chemistry and earned the label have entered an expanding marketplace for sustainable products.”

Source: www.epa.gov/saferchoice/frequently-asked-questions-safer-choice.

For more information, visit:
• Stepan HI&I Market Page
• Environmental Protection Agency
• Safer Chemical Ingredient List
• Safer Choice
• CleanGredients®

Stepan Company was honored to receive a 2017 U.S. EPA Safer Choice Partner of the Year Award in recognition of demonstrated leadership in furthering safer chemistry and products throughout the past year and promoting the new Safer Choice label.

Squeaky Clean-ers
Cleaning power for greasy, oily soils

AMMONYX® LO
Lauramine oxide
Long lasting foam, Excellent degreasing, Self-preserved

AMPHOSOL® HCG-HP
Cocamidopropyl betaine
Viscosity/Foam booster, Mild, Excess alkalinity preserved

AMPHOSOL® HCG-K
Cocamidopropyl betaine
Viscosity/Foam booster, Mild, CIT/MIT1 preserved

BIO-SOFT® EC-639
C12-14 lauryl alcohol ethoxylate, POE-8
Naturally-derived, Easy to handle, High temp cleaning, HLB 13.3, CP 73°C

BIO-SOFT® EC-680
C12-14 lauryl alcohol ethoxylate, POE-7
Naturally-derived, Easy to handle, General purpose, HLB 12.2, CP 51°C

BIO-SOFT® QS8-9
Nonionic Blend
More environmentally-friendly alternative with similar overall properties to NPE-9, HLB 13.3, CP 56°C

BIO-SOFT® N1-5
C11 alcohol ethoxylate, POE-5
Fast wetting, Moderate foam, Low pour point 6°C, HLB 11.2, CP 34°C

BIO-SOFT® N1-7
C11 alcohol ethoxylate, POE-7
Fast wetting, Low interfacial and surface tension, HLB 12.9, CP 58°C

BIO-SOFT® N1-9
C11 alcohol ethoxylate, POE-9
Good wetting, High solubility, General purpose, HLB 13.9, CP 83°C

BIO-SOFT® N25-7
C12-15 alcohol ethoxylate, POE-7
Excellent detergent, Low interfacial tension and CMC, HLB 12.2, CP 49°C

BIO-SOFT® N45-7
C14-15 alcohol ethoxylate, POE-7
High detergency, Moderate, stable foam, HLB 11.8, CP 46°C, MP2 23°C

BIO-SOFT® N91-6
C9-11 alcohol ethoxylate, POE-6
Fast wetting, High foam, Low pour point 6°C, HLB 12.4, CP 53°C

BIO-SOFT® N91-8
C9-11 alcohol ethoxylate, POE-8
Fast wetting, High foam, High temp cleaning, HLB 13.9, CP 81°C

BIO-SOFT® N-600
C12-13 alcohol ethoxylate blend
NPE replacement, I&I cleaning, Easy to handle, HLB 10.6, CP <25°C

BIO-SOFT® N-900
C9-11 alcohol ethoxylate blend
NPE replacement, General purpose, Easy to handle, HLB 13.0, CP 64°C

BIO-SOFT® N-901
C9-11 and C12-13 alcohol ethoxylate blend
NPE replacement, Degreasing, Easy to handle, HLB 12.0, CP 40°C

BIO-SOFT® N-1200
C9-11 and C12-15 alcohol ethoxylate blend
NPE replacement, Fragrance solubilization, Depersant, Easy to handle, HLB 13.5, CP 80°C

MAKON® DA-6
C10 branched alcohol ethoxylate
Fast wetting, Low pour point 6°C, Easy to handle, HLB 12, CP 43°C

1 CIT/MIT = Methylchloroisothiazolinone/Methylisothiazolinone
2 CP = Cloud Point at 1% aqueous
3 MP = Melting Point

AMPHOSOL® HCG-HP
Cocamidopropyl betaine
Viscosity/Foam booster, Mild, Excess alkalinity preserved

AMPHOSOL® HCG-K
Cocamidopropyl betaine
Viscosity/Foam booster, Mild, CIT/MIT1 preserved

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C12-14 lauryl alcohol ethoxylate, POE-8
Naturally-derived, Easy to handle, High temp cleaning, HLB 13.3, CP 73°C

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NPE replacement, I&I cleaning, Easy to handle, HLB 10.6, CP <25°C

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C9-11 alcohol ethoxylate blend
NPE replacement, General purpose, Easy to handle, HLB 13.0, CP 64°C

BIO-SOFT® N-901
C9-11 and C12-13 alcohol ethoxylate blend
NPE replacement, Degreasing, Easy to handle, HLB 12.0, CP 40°C

BIO-SOFT® N-1200
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NPE replacement, Fragrance solubilization, Depersant, Easy to handle, HLB 13.5, CP 80°C

MAKON® DA-6
C10 branched alcohol ethoxylate
Fast wetting, Low pour point 6°C, Easy to handle, HLB 12, CP 43°C
**Bubbly Primaries**

Foamers to clean away particulate, dirt and grime

**ALPHA-STEP® PC-48**
Sodium methyl-2-sulfolaurate & Disodium 2-sulfolaurate
Naturally-derived, High Foam, Multifunctional use in detergents, hand dish wash and personal care products, Great for counter top cleaners

**BIO-SOFT® D-40**
Sodium alkylbenzene sulfonate, linear & Sodium xylene sulfonate
Neutralized version of BIO-SOFT® S-101 (DDBSA), Wide pH range stability, Compatible with both hypochlorite and peroxide bleach, easy to handle liquid

**BIO-SOFT® D-62 LT**
Sodium alkylbenzene sulfonate, linear & Sodium xylene sulfonate
All the benefits of BIO-SOFT® D-40 in a higher actives slurry

**BIO-SOFT® S-101**
C11.4 alkylbenzene sulfonic acid, linear
DDBSA, Workhorse high foaming detergent, Provides flexibility if formulators want to neutralize

**BIO-TERGE® AS-40K**
Sodium C14-16 olefin sulfonate
Very high foaming with fast wetting, Great for car wash and hand soaps, Wide pH range stability, CIT/MIT preserved

**Dry Characters**
Dry, powdered, or tablet formulations

**NACCONOL® 90G**
Sodium dodecylbenzene sulfonate-linear
Workhorse high foaming detergent, Wide pH range stability, Compatible with solid bleaches, High active dry powder, ideal for solid form cleaners and detergents

**STEPANOL® DCFAS-N**
Sodium coco-sulfate
Naturally-derived, High dense foam, Fast wetting, Needle form for ease of handling

**STEPANOL® ME-DRY**
Sodium lauryl sulfate
Naturally-derived, High foam, Fast wetting, Compatible with solid bleaches, High active dry powder ideal for solid form cleaners and detergents

**Supporting Roles**
Boost performance, build viscosity, increase mildness, generate foam

**AMPHOSOL® CG-50**
Cocamidopropyl betaine
Naturally-derived, Mild, Boosts foam & viscosity, Higher active, Preservative-free

**AMPHOSOL® HCA-HP**
Cocamidopropyl betaine
Naturally-derived, Mild, Boosts foam & viscosity, Excess alkalinity preserved

**AMPHOSOL® HCG-HP**
Cocamidopropyl betaine
Naturally-derived, Mild, Boosts foam & viscosity, Includes natural moisturizer, Excess alkalinity preserved

**AMPHOSOL® HCG-K**
Cocamidopropyl betaine
Naturally-derived, Boosts foam & viscosity, Includes natural moisturizer, CIT/MIT preserved

**AMMONYX® LMDO**
Lauramidopropylamine oxide
Naturally-derived, Boosts foam & viscosity, Improves cleaning, Good wetting, Great for hand dishwash, Compatible with peroxide, Self-preserved

**AMMONYX® LO**
Laureamine oxide
Boosts foam & viscosity, Improves detergent, Fast wetting, Great for hard surface and laundry, Stable across wide pH range, Compatible with hypochlorite and peroxide bleach, Self-preserved

**STEPAN-MILD® GCC**
Lauramine oxide
Naturally-derived, Mild, Amide alternative, Provides viscosity and emolliency, Great for liquid dishwash and hand soaps

**Harmonizers**
Clarity, homogeneous solutions, Reduces cloud point, Improves film streak

**ALPHA-STEP® PC-48**
Sodium methyl-2-sulfolaurate & Disodium 2-sulfolaurate
Naturally-derived, Promotes more fluid detergents, Viscosity control

**BIO-TERGE® PAS-8S**
Sodium octane sulfonate
Lower foaming, Hydrotrope that adds cleaning power, Stable across wide pH range and compatible with hypochlorite and peroxide formulas

**Soft Cuddlers**
Fabric softening & Conditioning

**STEPANTEX® SP-90**
TEA ester quat
Vegetable-derived softening agent, Very good re-wetting, Non-yellowing to clothes, Readily biodegradable

**STEPANTEX® VT-90**
TEA ester quat
Tallow-derived softening agent, Very good re-wetting, Non-yellowing to clothes, Readily biodegradable

**STEPANATE® SKS**
Sodium xylene sulfonate
Very low foam, Excellent hydrotropes, Stable across wide pH range and compatible with hypochlorite formulas

**STEPANATE® SXS**
Sodium xylene sulfonate
Very low foam, Excellent hydrotropes, Stable across wide pH range and compatible with hypochlorite formulas

1 DDBSA = Dodecylbenzene sulfonic acid
**Naturally Inspired**

*High bio-based content*

Even though the biorenewable content of an ingredient is not a requirement for U.S. EPA Safer Choice certification, we understand our customers may have other criteria beyond Safer Choice when selecting an ingredient. Bio-content being one of them!

**STEPOL® DCFAS-N**
Sodium coco-sulfate, BCI = 100
Dense foam, Fast wetting, High active dry needles

**STEPLAN® ME-DRY**
Sodium lauryl sulfate, BCI = 100
High foam, Fast wetting, High active dry powder

**STEPLAN® WA-EXTRA HP**
Sodium lauryl sulfate, BCI = 100
High foam, Fast wetting, Excess alkalinity preserved

**STEPLAN® WA-EXTRA K**
Sodium lauryl sulfate, BCI = 100
High foam, Fast wetting, CIT/MIT preserved

**STEPANOL® ME-DRY**
Sodium lauryl sulfate, BCI = 100
High foam, Fast wetting, Excess alkalinity preserved

**STEPLAN® WA-EXTRA PCK**
Sodium lauryl sulfate, BCI = 100
Creamy foam, Fast wetting, CIT/MIT preserved

**STEPAN-MILD® GCC**
Glyceryl caprylate/caprate, BCI = 100
Meets direct release screen, Mild, Foam and feel enhancer, Structuring agent

**STEPAN-MILD® L3**
Lauryl lactyl lactate, BCI = 100
Boosts viscosity, Mild, Emollient, Moisturizer

**ALPHA-STEP® PC-48**
Sodium methyl-2-sulfonate & Disodium 2-sulfonate, BCI = 94
High foam, Multifunctional use, Mild

**STEPLANTEX® SP-90**
TEA ester quat, BCI = 81
Vegetable derived softener, Readily biodegradable

**STEPLANTEX® VT-80**
TEA ester quat, BCI = 81
Tallow derived softener, Readily biodegradable

**STEOL® CS-270 C**
Sodium laureth sulfate, 2 moles EO, BCI = 75
High foaming in hard and soft water, Mild

**AMMONYX® LMDO**
Lauryl diamidopropylamine oxide, BCI = 72
Boosts foam & viscosity, Improves cleaning, Good wetting

**AMPHOSOL® CG-50**
Cocamidopropyl betaine, BCI = 64
Mild, Boosts foam & viscosity, Includes natural moisturizer, Preservative-free

**AMPHOSOL® HCA-HP**
Cocamidopropyl betaine, BCI = 64
Mild, Boosts foaming & viscosity, Excess alkalinity preserved

**AMPHOSOL® HCG-HP**
Cocamidopropyl betaine, BCI = 64
Mild, Boosts foaming & viscosity, Excess alkalinity preserved

**AMPHOSOL® HCG-K**
Cocamidopropyl betaine, BCI = 64
Mild, Boosts foaming & viscosity, Includes natural moisturizer, CIT/MIT preserved

**AMPHOSOL® EC-690**
C12-14 lauryl alcohol ethoxylate, POE-7, BCI = 46
Easy to handle, General purpose, HLB 12.2

**AMPHOSOL® EC-639**
C12-14 lauryl alcohol ethoxylate, POE-8, BCI = 42
Easy to handle, High temp cleaning, HLB 13.3

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*BCI refers to the Biorenewable Carbon Index of the material. BCI is the number of biorenewable carbons (derived from plant, animal, or marine based sources) divided by the number of total carbons in the idealized molecule. BCI = 94

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**STEPLANTEX® SP-90**
TEA ester quat, BCI = 81
Vegetable derived softener, Readily biodegradable

**STEOL® CS-270 C**
Sodium laureth sulfate, 2 moles EO, BCI = 75
High foaming in hard and soft water, Mild

**AMMONYX® LMDO**
Lauryl diamidopropylamine oxide, BCI = 72
Boosts foam & viscosity, Improves cleaning, Good wetting

**AMPHOSOL® CG-50**
Cocamidopropyl betaine, BCI = 64
Mild, Boosts foam & viscosity, Includes natural moisturizer, Preservative-free

**AMPHOSOL® HCA-HP**
Cocamidopropyl betaine, BCI = 64
Mild, Boosts foaming & viscosity, Excess alkalinity preserved

**AMPHOSOL® HCG-HP**
Cocamidopropyl betaine, BCI = 64
Mild, Boosts foaming & viscosity, Includes natural moisturizer, Excess alkalinity preserved

**AMPHOSOL® HCG-K**
Cocamidopropyl betaine, BCI = 64
Mild, Boosts foaming & viscosity, Includes natural moisturizer, CIT/MIT preserved

**AMPHOSOL® EC-690**
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Easy to handle, General purpose, HLB 12.2

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*High bio-based content*

Even though the biorenewable content of an ingredient is not a requirement for U.S. EPA Safer Choice certification, we understand our customers may have other criteria beyond Safer Choice when selecting an ingredient. Bio-content being one of them!
**All Purpose Spray & Wipe Cleaner**

This non-caustic all purpose spray and wipe cleaner can be used in every room of the house.  

*Formula BCI = 80*

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>94.25</td>
</tr>
<tr>
<td>STEPANOL® WA-EXTRA K or PCK</td>
<td>3.00</td>
</tr>
<tr>
<td>BIO-SOFT® EC-690</td>
<td>1.70</td>
</tr>
<tr>
<td>Kathon™ CG (Dow Chemical)</td>
<td>0.05</td>
</tr>
<tr>
<td>Sodium Citrate</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Procedure**

1. Charge water.  
2. Begin agitation, add sodium citrate and blend in STEPANOL WA-EXTRA K or PCK.  
3. Once clear, slowly add BIO-SOFT EC-690.  
4. Blend in Kathon CG.  
5. Mix until homogeneous.

**Properties**

- Appearance at 25°C: Clear Liquid  
- pH, as is: 7.0 - 8.5  
- Viscosity at 25°C: Water thin

**Performance**

- As is Use: 100% Soil Removal  
- ASTM D4488-95

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**Bathroom Cleaner**

This ready-to-use bathroom cleaner removes soap scum and grime from tubs, showers, tiles and sinks. It contains citric acid and an amine oxide to provide foam for product cling and soil removal.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>91.00</td>
</tr>
<tr>
<td>AMMONYX® LO</td>
<td>5.00</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>4.00</td>
</tr>
</tbody>
</table>

**Procedure**

1. Charge water.  
2. With good agitation, add citric acid.  
3. Blend in AMMONYX LO.  
4. Mix until homogeneous.

**Properties**

- Appearance at 25°C: Clear Liquid  
- pH, as is: 2.0 - 3.5  
- Viscosity at 25°C: Water thin

**Performance**

- As is Use: 100% Soil Removal  
- ASTM D4488-95

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**Degreaser Concentrate**

This low alkalinity concentrate can be used at full strength to blast through tough, aged grease and grime or dilute up to 1:32 for light soil loads.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>54.00</td>
</tr>
<tr>
<td>STEPANATE® SXS</td>
<td>25.00</td>
</tr>
<tr>
<td>BIO-SOFT® EC-639</td>
<td>6.00</td>
</tr>
<tr>
<td>Sodium Carbonate</td>
<td>7.50</td>
</tr>
<tr>
<td>Sodium Citrate</td>
<td>7.50</td>
</tr>
</tbody>
</table>

**Procedure**

1. Charge water and STEPANATE SXS.  
2. With good agitation, slowly blend in BIO-SOFT EC-639.  
3. Continue mixing until homogeneous.  
4. Add sodium carbonate and sodium citrate.  
5. Mix until homogeneous.

**Properties**

- Appearance at 25°C: Clear Liquid  
- pH, as is: 10.0 - 11.4  
- Viscosity at 25°C: Water thin

**Performance**

- 1:18 Dilution: 95% Soil Removal  
- 1:24 Dilution: 84% Soil Removal  
- 1:36 Dilution: 76% Soil Removal  
- ASTM D4488-95

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**Kitchen Degreaser**

This ready-to-use, non-caustic kitchen spray degreaser cuts through grease on stovetops and cooktop hoods.

*Formula BCI = 88*

<table>
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<th>Ingredients</th>
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</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>96.00</td>
</tr>
<tr>
<td>BIO-SOFT® EC-639</td>
<td>0.50</td>
</tr>
<tr>
<td>Sodium Citrate</td>
<td>1.00</td>
</tr>
<tr>
<td>Dowanol™ PhB (Dow Chemical)</td>
<td>0.50</td>
</tr>
<tr>
<td>STEPANOL® WA-EXTRA K or PCK</td>
<td>2.00</td>
</tr>
</tbody>
</table>

**Procedure**

1. Charge water.  
2. Begin agitation, add blend in Dowanol PhB, sodium citrate, and STEPANOL WA-EXTRA K or PCK.  
3. Once clear, slowly add BIO-SOFT EC-639.  
4. Mix until homogeneous.

**Properties**

- Appearance at 25°C: Clear Liquid  
- pH, as is: 7.0 - 8.5  
- Viscosity at 25°C: Water thin

**Performance**

- As is Use: 82% Soil Removal  
- ASTM D4488-95

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**Properties**

- Appearance at 25°C: Clear Liquid  
- pH, as is: 10.0 - 11.4  
- Viscosity at 25°C: Water thin

**Performance**

- As is Use: 100% Soil Removal  
- ASTM D4488-95

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**Properties**

- Appearance at 25°C: Clear Liquid  
- pH, as is: 7.0 - 8.5  
- Viscosity at 25°C: Water thin

**Performance**

- As is Use: 82% Soil Removal  
- ASTM D4488-95

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**Properties**

- Appearance at 25°C: Clear Liquid  
- pH, as is: 10.0 - 11.4  
- Viscosity at 25°C: Water thin

**Performance**

- As is Use: 95% Soil Removal  
- ASTM D4488-95

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**Properties**

- Appearance at 25°C: Clear Liquid  
- pH, as is: 7.0 - 8.5  
- Viscosity at 25°C: Water thin

**Performance**

- As is Use: 95% Soil Removal  
- ASTM D4488-95
**Glass Cleaner Concentrate**

Dilute this glass cleaner concentrate 1:9 with water to remove smears, smudges and dust on glass, mirrors, chrome and stainless steel surfaces while leaving a streak-free shine.

### Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>71.70</td>
</tr>
<tr>
<td>BIO-SOFT® EC-639</td>
<td>2.00</td>
</tr>
<tr>
<td>BIO-TERGE® PAS-8S</td>
<td>18.00</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>8.30</td>
</tr>
</tbody>
</table>

### Procedure

1. Charge water and BIO-TERGE PAS-8S.
2. With good agitation, slowly blend in BIO-SOFT EC-639.
3. Once clear, add isopropanol.
4. Mix until homogeneous.

### Properties

- **Appearance at 25°C**: Clear Liquid
- **pH**, as is: 2.0 - 3.5
- **Viscosity at 25°C**: Water thin
- **Flash Point (PMCC)**: 52°C

### Performance:

- **Streaking**: Rating 9.2 out of 10
  
  Stepan Method 250-A: Hard Surface Cleaner Filming/Streaking Evaluation

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**Glass Cleaner**

This ready-to-use glass cleaner removes smears, smudges and dust on glass, mirrors, chrome and stainless steel surfaces while leaving a streak-free shine.

### Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>96.81</td>
</tr>
<tr>
<td>BIO-SOFT® EC-639</td>
<td>0.22</td>
</tr>
<tr>
<td>BIO-TERGE® PAS-8S</td>
<td>2.00</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>0.92</td>
</tr>
<tr>
<td>Kathon® CG (Dow Chemical)</td>
<td>0.05</td>
</tr>
</tbody>
</table>

### Procedure

1. Charge water and BIO-TERGE PAS-8S.
2. With good agitation, slowly blend in BIO-SOFT EC-639.
3. Add isopropanol and Kathon CG.
4. Mix until homogeneous.

### Properties

- **Appearance at 25°C**: Clear Liquid
- **pH**, as is: 4.5 - 6.5
- **Viscosity at 25°C**: Water thin
- **Flash Point (PMCC)**: >94°C

### Performance:

- **Streaking**: Rating 9.6 out of 10
  
  Stepan Method 250-A: Hard Surface Cleaner Filming/Streaking Evaluation

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**Frequently Asked Questions**

**What criteria are used to evaluate an ingredient and an end use product?**

The first document you should review is the Safer Choice Standard which identifies the requirements that both ingredients and end use products must meet to earn the Safer Choice label. In addition, there are the Master Criteria for Safer Ingredients and various Functional-Class Criteria. These documents define the characteristics and toxicity thresholds for ingredients that are acceptable in Safer Choice products. The U.S. EPA also provides guidance on ingredient disclosure and packaging. Further information can be found at [www.epa.gov/saferchoice/standard](http://www.epa.gov/saferchoice/standard).

**What is the advantage of using an ingredient listed on the CleanGredients® database?**

All ingredients will be reviewed by a third-party profiler and the U.S. EPA against a stringent set of health and environmental criteria. A product is only allowed to carry the Safer Choice label if each ingredient is among the safest in its ingredient class. Additionally, the product as a whole has to meet safety criteria, qualify as high-performing and be packaged in an environmentally-friendly manner.

It is at the discretion of the ingredient suppliers to showcase a particular ingredient on [www.cleangredients.org](http://www.cleangredients.org). The advantage to formulators is that these ingredients have been pre-approved by the U.S. EPA as meeting the Safer Choice standards. Therefore, a formulator is assured that the particular ingredient in question has passed the EPA’s review and a formulator will have reduced costs associated with review of that particular ingredient. There are other fees associated with an end use product review, but using an ingredient that is listed on CleanGredients can help reduce the cost to a formulator in obtaining a Safer Choice certification.

**Can I use an ingredient not listed on CleanGredients®?**

Yes. However, each ingredient will need to be reviewed by a third-party profiler and the U.S. EPA. The advantage of referencing a pre-approved ingredient is that you know it has already been reviewed and this can help reduce the cost associated with the end-use product review. You may also consider referencing the Safer Chemical Ingredient List (SCIL). This is a list of chemical ingredients, arranged by functional-use class that the Safer Choice Program has evaluated and determined to be safer than traditional chemical ingredients. This list is designed to help manufacturers find safer chemical alternatives that meet the criteria of the Safer Choice Program. This list is not intended to be exclusive. A third-party profiler and the U.S. EPA will still review and charge a fee, even if the ingredient is found on the SCIL.

**The Safer Chemical Ingredient List (SCIL) lists ingredients by chemical name. Can I use any company’s product?**

When seeking U.S. EPA Safer Choice approval, you will be required to reference each ingredient by trade name, supplier name and chemical description. If you intend to reference more than one supplier for the same ingredient, the U.S. EPA requires a formulator to document each unique trade name/supplier name on the formulation information submission in the Safer Choice Community, the online portal used by the third-party profilers and Safer Choice to manage submissions. Each unique trade name is reviewed separately and each unique trade name is charged a separate fee for review.

Even if a surfactant active has the identical chemical name and CAS number as another supplier, the trade name is reviewed separately and each unique trade name is charged a separate fee for review. A third-party profiler and the U.S. EPA will still review and charge a fee, even if the ingredient is found on the SCIL. Reference more than one supplier for the same ingredient.

**Once my product is approved for the Safer Choice label, is it good forever?**

No. Improvements in chemistry choices are happening all the time and Safer Choice adapts their criteria to stay current with the best options. Every three years your product must be re-reviewed against the currently-approved standard(s).
Frequently Asked Questions (cont.)

What does it mean to be a U.S. EPA Safer Choice Partner of the Year?
The U.S. EPA recognizes program participants who demonstrate leadership in furthering safer chemistry and products and promoting the new Safer Choice label. Program participants submit an application and are evaluated based on the following five criteria:
1. Participation in the Safer Choice program
2. Use of the Safer Choice label
3. Promotion and use of products using the Safer Choice label
4. Outreach and education on the Safer Choice program to consumers and end-users
5. Innovations in safer chemistry and other efforts to advance the Safer Choice program
Stepan is proud to say that we filed an application in 2015 and 2017 for a U.S. EPA Safer Choice Partner of the Year Award and in both years, were selected as winners of the Partner of the Year award along with other deserving award winners.

There are many eco-labels in the marketplace. How is the Safer Choice Program different?
According to the U.S. EPA, the Safer Choice’s labeling program is different from other eco-labels in that:
“First, we are focused on chemistry and identifying safer chemicals. Our approach to product review is grounded in EPA’s more than 40 years of experience in evaluating the human health and environmental characteristics of chemicals. This expertise enables us to go beyond established lists of ‘bad actor’ chemicals and to use expert judgment to determine the likely health and environmental hazards of chemicals that haven’t been widely studied. Second, we look at a full set of health and environmental endpoints based on a range of data, experimental and modeled, and expert judgment. Finally, we work closely with companies to help them find safer chemicals for their products.”
Source: https://www.epa.gov/saferchoice/frequently-asked-questions-safer-choice

Is Safer Choice related to the USDA’s BioPreferred® Program?
No. The BioPreferred Program is managed by the U.S. Department of Agriculture (USDA), with the goal to increase the purchase and use of U.S. bio-based products. This program has a mandatory purchasing requirement for federal agencies and their contractors and a voluntary labeling initiative. For more information, please go to the BioPreferred website.

Where can I find more information?
EPA’s Safer Choice website has the Safer Choice program history, standards, compliance schedules, an FAQ webpage, the EPA’s SCIL ingredient list, packaging guidance and more.

Stepan® product samples can be ordered through the Stepan website at www.stepan.com.
For further information, contact a Stepan North American Technical Service Representative at techserv@stepan.com or (800) 745-7837.