



Formulation

Name	HEAVY DUTY DEGREASER CONCENTRATE FOR OUTDOOR USE	
No.	1323	
Description	Achieve powerful performance and an improved environmental profile for your outdoor cleaning products such as vehicle and patio cleaning. This heavy duty degreaser concentrate contains BIO-SOFT® DR-13 and STEPANATE® SXS, which are listed on CleanGredients, and meet the criteria for direct release for use in outdoor products certified by the U.S. EPA's Safer Choice Program. BIO-SOFT® DR-13 is a nonionic surfactant that tackles greasy and oily soils and works well with the hydrotrope STEPANATE® SXS. The builder and chelating agent provide alkalinity and counter hard water deposits without the need for harsh solvents that can affect finishes. Dilute this concentrate for general outdoor cleaning applications. Green Your Clean using Stepan Ingredients!	
Formulation	<u>INGREDIENTS:</u>	<u>% by Weight</u> <u>Functionality</u>
	Deionized Water	q.s. to 100.0 Diluent
	BIO-SOFT® DR-13	9.0 Cleansing Agent
	STEPANATE® SXS	4.8 Hydrotrope
	Methylglycine N,N-Diacetic Acid (MGDA), 40% solution	8.3 Chelating Agent
	Citric Acid	q.s. pH Adjuster, Builder
	Total	100.0
Procedure	<ol style="list-style-type: none"> Mix STEPANATE® SXS and Deionized Water. Add MGDA, 40% solution, and mix until thoroughly dissolved. Add in BIO-SOFT® DR-13. Add Citric Acid to adjust the pH to 8-9. The typical amount needed is 0.7% to 0.5% by weight. <p>-</p> <p>Alternate Ingredients:</p> <ol style="list-style-type: none"> BIO-SOFT® DR-139 can be used as an alternate to BIO-SOFT® DR-13. Adjust amount to 10.6% by weight. Tetrasodium Glutamate Diacetate (GLDA), 47% solution can be used as an alternate chelating agent to MGDA, 40% solution. Adjust amount to 8.8% by weight. 	
Physical Properties	Appearance at 25°C	Clear liquid
	pH, as is	8 - 9
	Viscosity at 25°C, cps	Water thin
	VOC, as is (calculated), %	0
Storage/Stability	Freeze/Thaw, 3 cycles	Pass
	4 weeks at 50°C	Stable
	4 weeks at 25°C	Stable
	4 weeks at 4°C	Stable
Instructions for Use	Recommended dilution level is 1:10 to 1:40.	
External Comment	Marketing Notes: All Stepan ingredients in this formulation are approved for use in direct release	

applications under the surfactant screen of the U.S. EPA Safer Choice Standard and are listed on www.cleangredients.org. Safer Choice formulations for outdoor use must contain chemicals that meet the U.S. EPA Safer Choice criteria for direct release products (<https://www.epa.gov/saferchoice/products>). U.S. EPA's Safer Chemical Ingredient List (SCIL) can be found at <https://www.epa.gov/saferchoice/safer-ingredients>. This formulation is Volatile Organic Compound (VOC) compliant with U.S. Federal and all State VOC standards for general-purpose cleaners as of January 2019 (excluding additives). "Improved environmental profile" and "green" refer to the use of Stepan ingredients that are considered favorable by the U.S. EPA Safer Choice standard (<https://www.epa.gov/saferchoice/safer-choice-standard>). The manufacturer is responsible for the use of other "green" ingredients, including but not limited to Chelating Agent, Builder, Preservative, Fragrance, and/or Dye. Use of the term "green" or other environmental claims on the finished product or label is at the sole risk of the finished product manufacturer, for which Stepan bears no responsibility. Label and/or trademark usage of the final product is the sole responsibility of the finished product manufacturer."

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For
Additional
Assistance

For applications or product handling assistance, call our Technical Service Department at 1-800-745-7837 (U.S.) or 011-334-76-505-100 (Europe).
For ordering assistance, call our Account Service Department at 1-800-457-7673.

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