

Top load – Liquid Laundry Detergent

Formulation No.: INHC 25 004

Description: **Berol® 611** an environmentally responsible alternative to NPEO for more effective penetration and wetting performance to enhance cleaning performance.
Dissolvine® GL-47-S is a readily biodegradable bio based chelating agent that enhances the preservation & cleaning performance of your formulation.
Alcosperse® 747 is a hydrophobically modified copolymer designed for use in detergent. It helps in ARD benefits during application.

Formula

Trade Name	Chemical Name	% w/w	Supplier
Deionized Water	Water (Aqua)	ad 100	Local
Sodium Laureth Sulfate (70%)	Sodium Laureth Sulfate (SLES) (70%)	7.00	Local
Sodium Hydroxide	Sodium Hydroxide (48%)	q.s.	Local
Berol® 611	Alcohol Ethoxylate	8.00	Nouryon
Alcosperse® 747	Hydrophobically modified Copolymer	2.0	Nouryon
Dissolvine® GL-47-S	Tetrasodium glutamate diacetate	2.0	Nouryon
Sodium chloride	Sodium chloride	q.s.	Nouryon
Preservative, Fragrance, Dye	-	q.s.	Local
Total:		100.00%	

Procedure:

1. Charge deionized water & add SLES and mix well until it dissolve properly.
2. Add Berol 611 and Alcosperse 747 stepwise, mixing until homogeneous before adding the next ingredient.
3. Add Dissolvine GL-47-S and mix till it becomes homogeneous.
4. Adjust pH to a target of 8-9 using sodium hydroxide. Add required amount of salt to achieve desired viscosity.
5. Add preservative, dye, fragrance and other additives and mix until homogeneous

Properties:

Appearance:	Clear liquid
Brookfield Viscosity at 25°C, cps:	800-1300
pH:	8.0 – 9.0

The information given and the recommendations made herein are based on our research and are believed to be accurate but no guarantee of their accuracy is made. In every case we urge and recommend that purchasers before using any product in full scale production make their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purposes under their own operating conditions. The results of toxicity testing of the polymers used in the formulations are found in the respective technical literature, the safety of the formulation has not been established by testing. The suitability of the final formulation should be confirmed in all respects by appropriate evaluation. No representative of ours has any authority to waive or change the foregoing provisions but, subject to such provisions, our engineers are available to assist purchasers in adapting our products to their needs and to the circumstances prevailing in their business. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without the authority from the owner of this patent. We also expect purchasers to use our products in accordance with the guiding principles of the Chemical Manufacturers Association's Responsible Care® program.

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