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TECHNICAL DATA SHEET

Silquat[®] J2-2B-PG
Multifunctional Emulsifier

Distearmonium/Diethonium Chloride PG Dimethicone

DESCRIPTION

Silquat[®] J2-2B-PG is a novel silicone emulsifier and conditioner. The unique structure and weak cationic charge results in a molecule that provides not only excellent emulsification properties, but conditioning effects on hair and skin. **Silquat J2-2B-PG** is PEG free and 70% active in propylene glycol. The INCI name is Distearmonium/Diethonium Chloride PG Dimethicone.

TYPICAL PROPERTIES

Appearance	Hazy liquid
Color, Gardner	2
Active Content, %	70
Viscosity at 25 ^o C, cps	3,000
Experimental HLB	11

USES & APPLICATIONS

Silquat J2-2B-PG is a member of a series of products which differ by the relative weight percent of hydrophilic, lipophilic and "siliphilic" regions in the molecules. **Silquat J2-2B-PG** is the most hydrophilic with a laboratory determined HLB of 11.

We have found **Silquat J2-2B-PG** emulsifier effective in hair care for conditioning providing extraordinary wet comb and dry comb as well as unique lubricity, antistatic properties and smoothness to the hair fibres. The use level is 0.5% ~ 1%.

We have also made skin care products with **Silquat J2-2B-PG** which provide the skin with a smooth powdery after-feel, extraordinary softness, unique lubricity and substantivity. Use levels are 0.5% ~ 1%.

Silquat J2-2B-PG is a unique cationic Oil-in-Water emulsifier for skin care, hair care, sun care and make-up products. These cationic emulsions offer a rich smooth powdery after-feel that allows high active loadings without sacrificing efficacy. The use level is 3% ~ 5%.

Silquat J2-2B-PG cationic emulsifier can be also used as a conditioning agent in combination with a non-ionic organic or a silicone emulsifier to impart unique sensory properties such as rich non-greasy, luxurious, very soft, smooth powdery dry feel and smooth powdery velvety skin feel. The use level is 3% ~ 4%.

Silquat[®] J2-2B-PG enables high lipophilic, high SPF and highly concentrated pigmented products for skin care, sun care and make-up. These products offer enhanced consumer benefits such as a non-greasy feel and better coverage and with good spreadability and superior skin feel.

Silquat J2-2B-PG masks the negative sensory properties of high lipophilic loading in skin moisturizers with specific aesthetics, giving the final products a very soft smooth powdery skin feel and an improved long lasting moisturizing effect.

Silquat J2-2B-PG with a HLB of 11 is very effective as an emulsifier for oil-in-water/ ethanol emulsions. **Silquat J2-2B-PG** is also a very good skin feel modifier. Use levels are 1% ~ 5%.

SOLUBILITY

	Solvent	Silquat J2-2B-PG			Solvent	Silquat J2-2B-PG			
Hydro-carbons	Water	1%	Soluble	Silicones	Cyclomethicone (D5)	1%	Dispersible		
		5%	Dispersible			5%	Insoluble		
	Mineral Oils	1%	Soluble		Dimethicone	1%	Dispersible		
		5%	Soluble			5%	Dispersible		
	Isododecane	1%	Dispersible		Phenyl Trimethicone	1%	Soluble		
		5%	Dispersible			5%	Soluble		
	Isoparaffin	1%	Soluble		Trimethyl-siloxysilicate	1%	Dispersible		
		5%	Soluble			5%	Dispersible		
	Esters	C8/C10 Triglycerides	1%		Dispersible	Natural Oils	Olive oil	1%	Soluble
			5%		Insoluble			5%	Soluble
Isopropyl Myristate		1%	Dispersible	Sunflower oil	1%		Soluble		
		5%	Insoluble		5%		Soluble		
Trioctyldodecyl Citrate		1%	Soluble	Castor oil	1%		Soluble		
		5%	Soluble		5%		Soluble		
C12-15 alkyl benzoate		1%	Soluble	Alcohols	Octyl-dodecanol		1%	Soluble	
		5%	Soluble				5%	Soluble	
PPG-14 Butyl Ether	1%	Dispersible	Isopropanol		1%	Soluble			
	5%	Dispersible			5%	Soluble			
Dicaprylyl Ether	1%	Dispersible	Ethanol		1%	Soluble			
	5%	Insoluble			5%	Soluble			
Glycols	Glycerin	1%	Soluble		Glycols	Glycerin	1%	Soluble	
		5%	Soluble				5%	Soluble	
	Propylene Glycol	1%	Soluble	Propylene Glycol		1%	Soluble		
		5%	Soluble			5%	Soluble		
	Butylene Glycol	1%	Soluble	Butylene Glycol		1%	Soluble		
		5%	Soluble			5%	Soluble		
	Hexylene Glycol	1%	Soluble	Hexylene Glycol		1%	Soluble		
		5%	Soluble			5%	Soluble		

SAFETY

Before handling, read the Material Safety Data Sheet and container label for safe use, physical and health hazard information.

STORAGE AND SHELF LIFE

When stored between 10 and 40°C, **Silquat® J2-2B-PG** has a shelf life of 36 months from the date of manufacture.

PACKAGING

Silquat J2-2B-PG is supplied in 20kg pails and 200kg drums.

LEGAL DISCLAIMER

Siltech Corporation believes that the information in this technical data sheet is an accurate description of the typical uses of the product. Siltech Corporation, however, disclaims any liability for incidental or consequential damages, which may result from the use of the product that are beyond its control. Therefore, it is the user's responsibility to thoroughly test the product in their particular application to determine its performance, efficacy and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual property right.

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