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TECHNICAL DATA SHEET

**Silquat® J2-4B**  
**Multifunctional Emulsifier**

Distearmonium/Diethonium Chloride PG Dimethicone

**DESCRIPTION**

**Silquat® J2-4B** is a novel silicone emulsifier and conditioners. The unique structure and weak cationic charge results not only excellent emulsification properties, but conditioning effects on hair and skin.

The INCI name is Distearmonium/Diethonium Chloride PG Dimethicone.

**TYPICAL PROPERTIES**

	<b>Silquat J2-4B</b>
Appearance	Hazy liquid
Color, Gardner	1
Active Content, %	70
Viscosity at 25 <sup>0</sup> C, cps	9,000
Experimental HLB	9

**USES & APPLICATIONS**

**Silquat J2-4B** is a member of a series of products which differ by the relative weight percents of hydrophilic, lipophilic and ösiliphilicö regions in the molecules. **Silquat J2-4B** has the second highest laboratory determined HLB of 9.

Multi-domain Silicone Quats have excellent properties and unique sensory profiles. We have found **Silquat J2-4B** effective in hair care for conditioning to provide extraordinary wet comb and dry comb as well as unique lubricity, antistatic properties and smoothness to the hair fibres. The usage level is 0.5% ~ 1%.

We have also made skin care products which provide the skin with a smooth powdery after-feel, extraordinary softness, unique lubricity and substantivity. Usage levels are 0.5% ~ 1%.

**Silquat J2-4B** is a unique cationic Oil-in-Water emulsifiers 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 usage level is 3% ~ 5%.

**Silquat J2-4B** cationic emulsifier can be also used 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 usage level is 3% ~ 4%.

**Silquat® J2-4B** offers formulators a means to formulate high lipophilic, high SPF and high concentration of pigments in skin care, sun care and make up products to achieve some enhanced consumer benefits such as non-greasy feel and have heavy coverage which still spreads and feels easy on skin.

**Silquat J2-4B** masks the negative sensory properties of high lipophilic loading in skin moisturization with specific aesthetics, giving the products a very soft smooth powdery skin feel and long lasting moisturizing effect.

**Silquat J2-4B** is also very effective as an emulsifier for oil-in-water/ethanol emulsions. They are also very good skin feel modifiers. Usage levels are 1% ~ 5%.

### Solubility

		Solvent		Silquat J2-4B					
Hydro-carbons	Water	1%	Dispersible	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%	Soluble			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%		Dispersible			5%	Soluble
Isopropyl Myristate		1%	Dispersible	Sunflower oil	1%		Soluble		
		5%	Dispersible		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%	Soluble	Isopropanol		1%	Soluble			
	5%	Soluble			5%	Soluble			
Dicaprylyl Ether	1%	Dispersible	Ethanol		1%	Soluble			
	5%	Dispersible			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, all **Silquat® J2-4B** products has a shelf life of 36 months from the date of manufacture.

## **PACKAGING**

All products in this series are 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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