



SILTECH CORPORATION
225 Wicksteed Avenue
Toronto, Ontario, Canada, M4H 1G5
(416)424-4567 (Tel) (416)424-3158 (Fax)

TECHNICAL DATA SHEET

Siltech[®] P-101, P-102b, P-103, P-103b
Silicone Polyether Emulsifier and Drainage aids

DESCRIPTION

Siltech[®] P-101, P-102b, P-103 and P-103b are water insoluble to slightly dispersible and alcohol soluble silicone polyether surfactants. These are highly surface active species.

TYPICAL PROPERTIES

Property	Siltech P-101	Siltech P-102b	Siltech P-103	Siltech P-103b
Appearance	Soft wax	Clear to slightly hazy liquid		
Colour, Gardner	1	1	1	1
Viscosity @ 25°C, Cps	N/A	20,000	5,000	30,000
Cloud Point °C	<25	<25	<25	<25
Water Solubility @ 1%	Dispersible	Insoluble	Insoluble	Insoluble
IPA Solubility @1%	Soluble	Soluble	Soluble	Soluble

APPLICATION & USES

Siltech P-101, P-102b, and **P-103** or **P-103b** are used in combinations as drainage aids in pulp manufacture and as dispersing and emulsifying agents for organic and silicone oils in pulping and other industrial chemical formulations. They lower surface tension and interfacial tension stabilizing water/oil and water air interfaces. Significant foam control in water based formulations may be seen as well.

Siltech P-101, P-102b, and **P-103** or **P-103b** have been shown to provide excellent dispersion of silicones in aqueous systems including black liquor.

Siltech P-101, P-102b, and **P-103** or **P-103b** have been shown to enhance drainage of aqueous fluids from pulp and other fibrous materials.

Siltech P-101, P-102b, and **P-103** or **P-103b** recommended starting ratios are 1:2:1 as dispersion/emulsifying agents for difficult to emulsify formulations. In many cases, other ratios such as 1:1 **Siltech P-102b:** and **P-103** or **P-103b** are the ideal combination, so it is critical to do screening studies in your specific system.

SHELF LIFE

When stored in the original, unopened containers between 10 and 40⁰C, **Siltech[®] P-101, P-102b, P-103** and **P-103b** have a shelf life of 36 months from date of manufacture.

PACKAGING

Siltech P-101, P-102b, P-103 and **P-103b** 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.

SILTECH[®] is a registered trademark of Siltech Corporation, Toronto, Ontario, Canada.

©January 2014