



## Technical Data

### ButterGel™ Inks (Hybrid Inks)

#### 1. General Information:

All ButterGel inks are suitable for plastic and metal refills. Jumbo refills require grease follower. All inks rubber elastic in order to prevent gooping. These inks require Special tips available from **Premec SA** or **ESSEM Co.** designated **OBGL Tips (High) or Low Viscosity ink** tips. Silicone grease follower in regular refill is not essential but it will provide extra protection from back leakage. **There are many suppliers of Silicone Grease (Polybutene base Grease) Follower like Kwangsuk Oil & Chemical Co. Ltd in Korea.** Ideal viscosity of the Silicone Follower must be 4,305 to 4,325 CPS at 25°C. Our ButterGel inks generally have a shelf life of minimum two years in refills made of suitable materials. Provided that the refills are not exposed to extremely unfavorable climate conditions. These inks are distinguished by especially well balanced properties. This assortment satisfies nearly all customer's requests due to a high degree of reliability and experience.

#### 2. Physical data and special properties:

Type	Ref. No.	Quality	Status	Color	Viscosity @ 25° C CPS	Surface Tension @ 25° C Dynes/CM	pH	Tips Ni/Ag Stainless Steel
ButterGel™ Ink								
ButterGel Black	30029 (23024)	Deluxe	S	Black	1,600 ± 400	>37	6.5 ± 1.0	0.5 - 0.8 OBG
ButterGel Blue	23157B1 (16153A)	Deluxe	S	Blue	1,800 ± 300	>37	8.5 ± 1.0	0.5 - 0.8 OBG
ButterGel Blue	41025C	Deluxe	S - ILF	Blue	1,800 ± 300	>37	6.5 ± 1.0	0.5 - 0.8 OBG
ButterGel Red	35098C	Deluxe	S	Red	1,600 ± 300	>37	6.5 ± 1.0	0.5 - 0.8 OBG
ButterGel Red	35142	Deluxe	E - ILF	Red	1,600 ± 300	>37	6.5 ± 1.0	0.5 - 0.8 OBG
ButterGel Green	40013	Deluxe	S	Green	5,000±1000	>37	7.0 ± 1.0	0.5 - 0.8 OBG

S = Standard Ink

R: Revised

E: Experimental

S - ILF = Improved Light Fastness

All production inks are ASTM D-4236 and EN 71 Panel approved. The finished ball pen needs separate ASTM D-4236 approval

The information given herein is based on our current knowledge and experience. In view of the many factors that may affect processing and application. These claims do not relieve processors from the responsibility of carrying out their own tests and experiments. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

