

# Quick Spread Ointment

Easy to apply occlusive ointment for the drug delivery of lipophilic active

Trusted technical expertise enabled by DuPont™ Liveo™ Healthcare Silicone Solutions can enhance a range of healthcare industry solutions and are differentiated by a greater degree of testing, quality control and regulatory support.

Ref: 1704

This ointment is a suitable matrix for drug delivery of lidocaine. The presence of Liveo™ ST-Elastomer 10 in the ointment enhances the sensorial experience versus petrolatum with better spreadability, smoother and less tacky feel on the skin while maintaining the occlusivity.

Phase	Material Name	Chemical Description	No lidocaine % w/w	With lidocaine % w/w
A	White Petroleum Jelly	Microcrystalline wax, Paraffin oil and Paraffin	70.0	56.0
	Liveo™ ST-Elastomer 10	Cyclopentasiloxane and Dimethicone Crosspolymer	30.0	24.0
B	Isopropyl Myristate	Isopropyl Myristate	–	17.5
	Lidocaine	Lidocaine	–	2.5

## Procedure – formulation without lidocaine

1. Heat petrolatum to 50 °C
2. Add ST-Elastomer 10 under mixing
3. Cool to room temperature under mixing

## Procedure – formulation with lidocaine

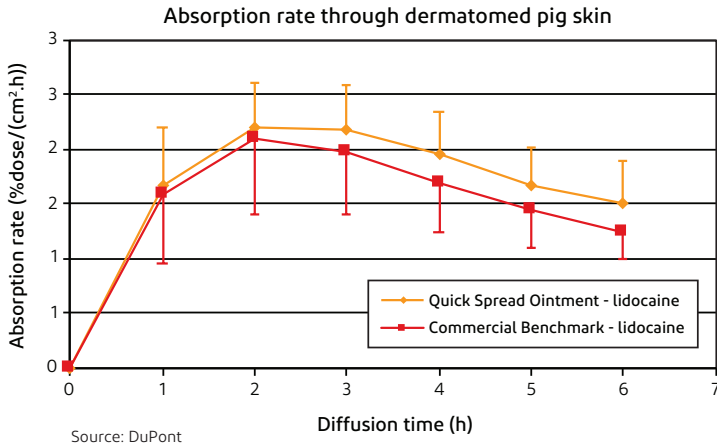
1. Mix ingredients of phase A and heat to 50 °C
2. Heat phase B ingredients to 50 °C under mixing until homogeneous
3. Add phase B to phase A under mixing
4. Cool to room temperature under mixing

## Characteristics – formulation without lidocaine

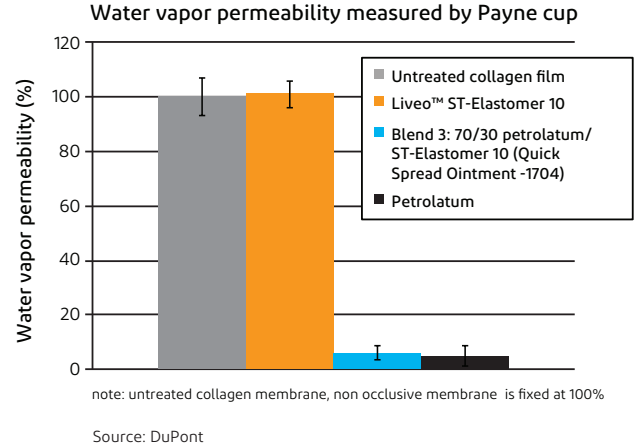
Aspect	Ointment
Color	White
Viscosity	238000 (20°C Brookfield DV II – Spindle 7 – speed 20)
Density (20°C)	0.865

## Performances and Patient Benefits

### Proven in-vitro skin penetration of lidocaine

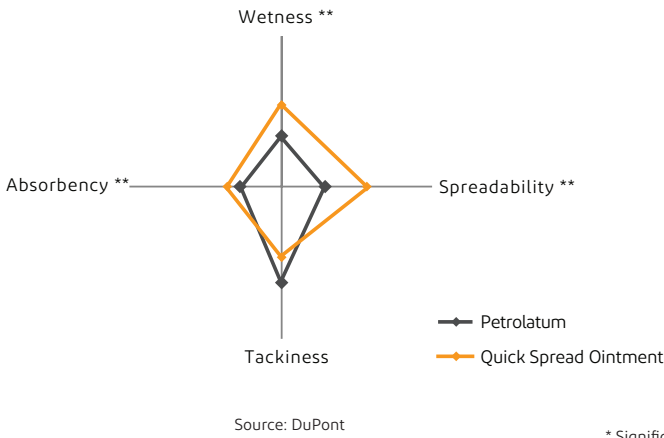


### Occlusive ointment

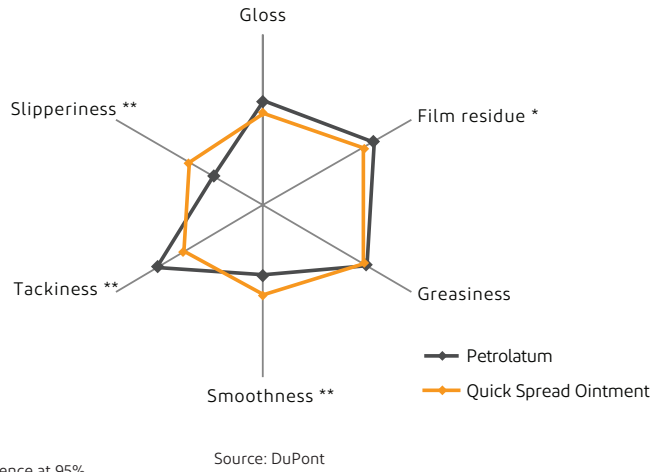


### Enhanced sensory profile

#### Sensory evaluation – before absorption



#### Sensory evaluation – after absorption



\* Significant difference at 95%  
 \*\* Significant difference at 99%



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