

# PERSONAL CARE



## WYCARE™ conditioning & rheology control cationic polymers for skin & hair care

Prime Formulations Ltd provides a range of cationic polymers that enhance the look and feel of both hair and skin. Designed to provide static free, shiny hair that is soft to the touch or skin that feels smooth and moisturised in hair and body washes for both rinse off and leave on formulations.

### Conditioning polymers

The WYCARE™ range of cationic conditioning polymers can be used in a variety of personal care applications where a conditioning effect is required.

Hair has an overall negative charge, WYCARE™ cationic conditioning polymers can adsorb onto the negative sites to film form leaving the surface of the hair shaft appear and feel soft and smooth.

Product	INCI Name	Cationic Charge	Preservative
WYCARE™ PQ6	Polyquaternium-6	High	Preservative free
WYCARE™ 7MP	Polyquaternium-7	Medium	Methyl and propyl paraben
WYCARE™ 7SB	Polyquaternium-7	Medium	Sodium Benzoate



## WYCARE™ 7MP & 7SB

WYCARE™ 7MP and WYCARE™ 7SB are cationic copolymers of diallyl dimethyl ammonium chloride (DADMAC) and acrylamide which have been engineered to have improved compatibility with anionic and amphoteric surfactants. The polymers are water soluble and have a wide applicability in leave on and wash off skin and hair formulations.

### Features & benefits

- Ease of use
- Ease of wet and dry combing
- Reduction in static
- Improved lather and foam stability
- Provides conditioning effects even at low levels
- No build up
- Imparts slip and lubricity
- Compatible with a wide range of anionic, non-ionic and cationic surfactants

### Formulation

It is often desirable for formulators to produce clear personal care products which can be challenging to maintain the clarity whilst imparting a conditioning effect. WYCARE™ 7MP and WYCARE™ 7SB can be used in clear formulations with tolerance to both salt additions and pH shifts.

To achieve good clarity levels in liquid formulations it is recommended to add WYCARE™ 7MP or WYCARE™ 7SB at the beginning of the formulation. The order of other additives can be adjusted to maintain clarity.

The conditioning efficacy of the cationic polymer can be demonstrated by means of the Rubine Dye Test which shows that the polymer is highly substantive at low levels and in surfactant systems.

## WYCARE™ PQ6

WYCARE™ PQ6 is a highly charged cationic homopolymer of diallyl dimethyl ammonium chloride (DADMAC) and can be used as an efficient conditioner in skin and hair care applications.

WYCARE™ PQ6 is ideally suited for use in after-wash hair conditioners (including emulsions) where the high cationic charge conditions dry or damaged hair.

### Features & benefits

- Ease of use
- Ease of wet and dry combing
- Reduction in static
- Compatible with high levels of alcohol
- Preservative free

### Formulation

Due to the high cationicity of WYCARE™ PQ6 it is not suitable for formulations based on anionic surfactants but does have limited compatibility with amphoteric surfactants.



## Rheology control

The WYCARE™ range of non-aqueous cationic conditioning polymers can be used in a variety of personal care applications where they provide multi-functional benefits imparting excellent conditioning effects whilst acting as a rheology modifier.

WYCARE™ 37E is suitable for use in mineral oil free formulations.

Product	INCI Name	Base Oil
WYCARE™ 37E	Polyquaternium-37 (and) Propylene Glycol Dicaprylate/Dicaprate (and) Trideceth-6	Ester
WYCARE™ 37M	Polyquaternium-37 (and) mineral oil (and) Trideceth-6	Mineral
WYCARE™ 32M	Polyquaternium-32 (and) mineral oil (and) Trideceth-6	Mineral

## Features & benefits

- Ease of use; requires no pre-mixing or specialist equipment
- Can be used in cold aqueous formulations and thickens on agitation
- Can be added at any point during manufacture
- High thickening efficiency
- Aids suspension of organic and inorganic pigments
- Provides conditioning effects even at low levels
- More uniform performance when compared to natural gums
- Compatible with oil, silicones and emollient esters
- Suitable for thickening up to 50% denatured ethanol formulations
- Provides opacifying properties
- Can be used in conjunction with non-ionic UV absorbers making it suitable for sunscreens

## Formulation

WYCARE™ 37E, WYCARE™ 37M and WYCARE™ 32M are designed for use in formulations of non-ionic and cationic ingredients. It is particularly effective for rheology control in the pH range 3-6.





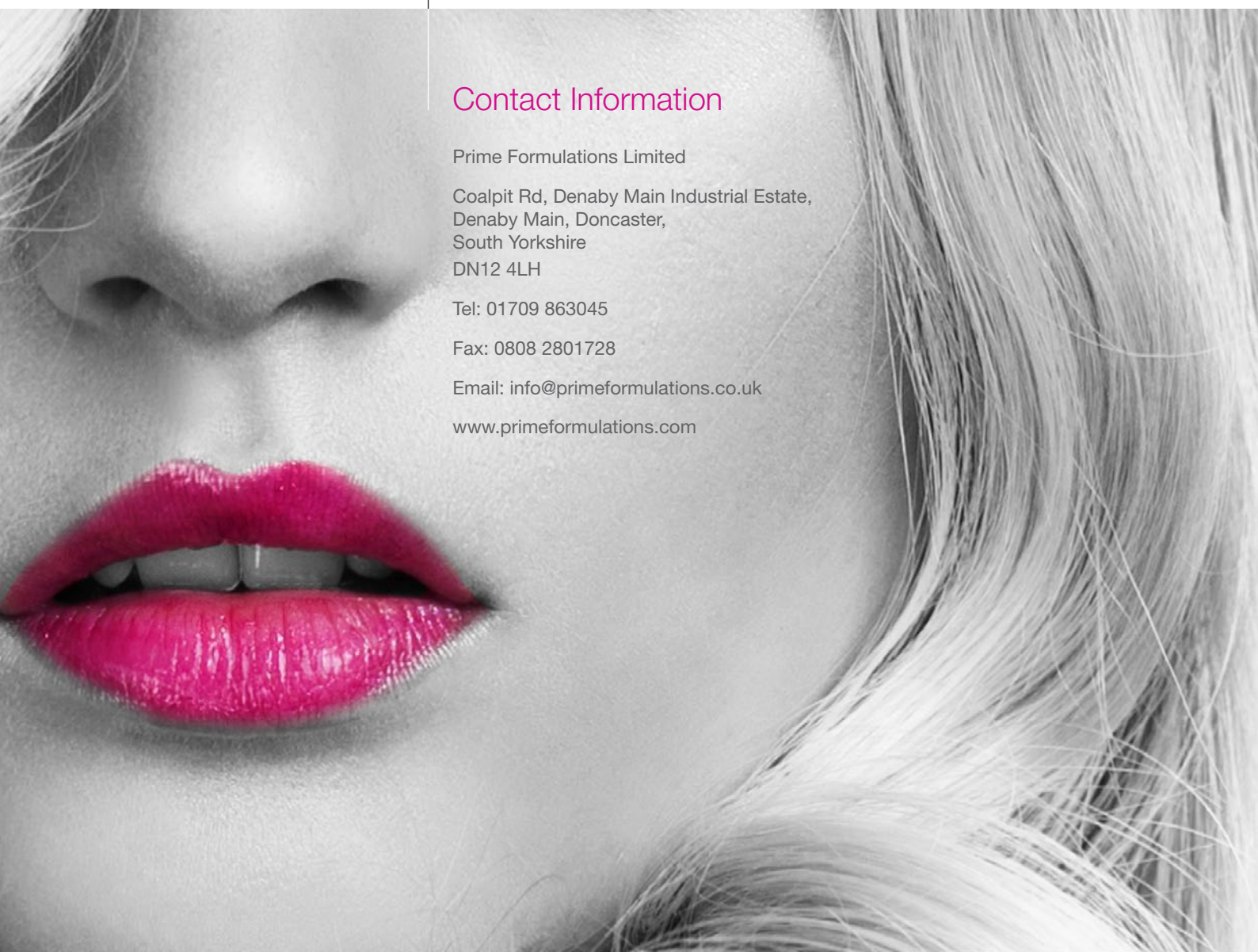


		Rheology Control			Conditioners		
		WYCARE™ 32M	WYCARE™ 37E	WYCARE™ 37M	WYCARE™ PQ6	WYCARE™ 7MP	WYCARE™ 7SB
Decorative Cosmetic	Eye make up				•	•	•
	Facial make up				•	•	•
	Lip products				•		
Hair Care	2-in-1 products					•	•
	Conditioners	•	•	•	•	•	•
	Hair dyes	•	•	•	•	•	•
	Perms and relaxants				•	•	•
	Shampoos					•	•
	Styling Agents	•	•	•	•	•	•
Skin Care	Anti-ageing				•	•	•
	Anti-wrinkle				•	•	•
	Baby care rinse off				•	•	•
	Baby care leave on				•		
	Body care				•	•	•
	Cleanser				•	•	•
	Face mask		•	•	•	•	•
	Hand care				•	•	•
	Shaving				•	•	•
	Aftershave				•	•	•
	Skin moisturiser				•	•	•
	Sun care				•	•	•
Toiletries	Bar soap					•	•
	Bath additives					•	•
	Body wash					•	•
	Shower gel					•	•
	Liquid soap					•	•
	Hand disinfectant					•	•



**FORMULATIONS**

Conditioning  
Polymers for Hair  
and Skin Care



## Contact Information

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## Warranty

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