



# Arquad® 2C-72 PG surfactant

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High performance, non-flammable  
emulsifier for car rinse aid formulations

**Nouryon**



# Arquad® 2C-72 PG surfactant

A high-performance, non-flammable emulsifier to enhance drying and reduce streaking

To enhance customer satisfaction as vehicles exit the car wash, formulators have been developing specialized drying aids that are sprayed onto the vehicle in the final rinse step. Typical rinse aid emulsifiers, however, are flammable, making ingredient handling and storage difficult.

We have developed a safer, non-flammable and easy to handle high performance emulsifier, Arquad® 2C-72 PG surfactant. Arquad® 2C-72 PG surfactant delivers fast beading action for rinse aid formulators, enabling faster dry times and premium shine. It is a low viscosity liquid even at low temperatures and easily dissolves into water when formulating. The surfactant is based on natural vegetable-based ingredients, and is largely bio-based.

## Functional benefits for car wash owners

- Rapid vehicle drying time
- Enhanced vehicle shine
- Beading of water, easily removed with blown air
- Low streak and spotting formulation
- Based on natural vegetable-based surfactant sources

## Functional benefits for car wash formulators

- High flash point with low risk of fire or vapor ignition
- Low temperature stability and pumpability
- Fast and effective emulsification
- Bio-based – high renewable carbon index

## Typical physical properties

Property	Value
Active matter, %	69-73%
Color, Gardner	<3.5
Flash point	>200°C / 392°F
Free amine, %	<3.5
pH (10% in ethanol/water 1:1)	4-8
Pour point	-6°C / -21°F

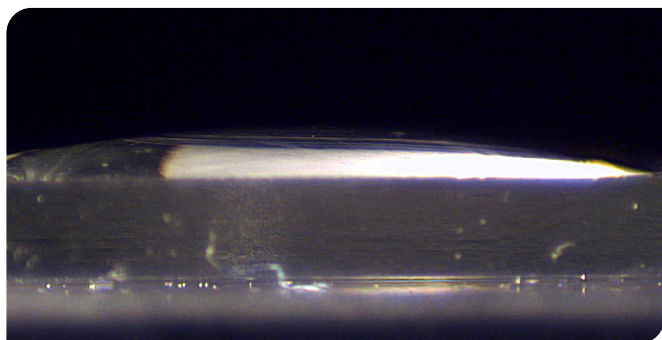
### Arquad® 2C-72 PG surfactant

- Effective emulsifier to formulate rinse aid additives for vehicle cleaning
- Helps bead water from the vehicle surface (once formulated), allowing droplets to be blown free
- Enhances vehicle drying, leaving a streak-free shine on treated vehicle surfaces
- Safe and easy to handle ingredient – non-flammable, low viscosity liquid, even at low temperatures
- High activity ingredient – 72% active
- Vegetable-based, naturally derived

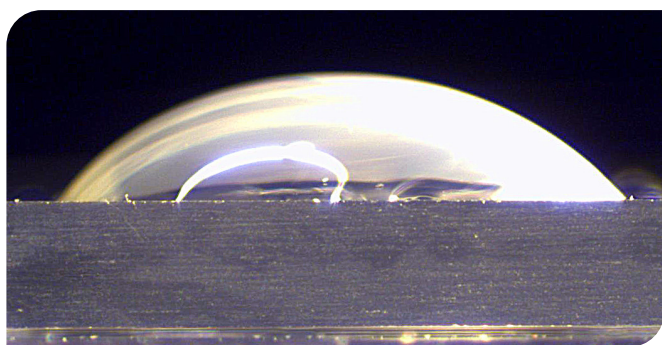


## Arquad® 2C-72 surfactant delivers fast dry time, premium shine and cleaning performance

Drop test to show the effect of treating of a surface with premium one-step solvent based car rinse aid formulation  
Water droplet placed onto treated glass surface to illustrate the effect of premium one-step treatment to a proxy for a car surface. Test illustrates enhanced water beading on surfaces treated with the rinse aid diluted 1:5 for treatment of glass.



Untreated glass surface (control)  
Water sprayed on the untreated glass surface  
Contact angle: untreated glass 19.5°



Treated glass surface with car rinse aid  
Water sprayed after glass surface was rinsed with the premium solvent base car rinse  
Contact angle: treated glass 43.9°

### Guideline formulations

The following guideline formulations are meant to provide a starting point for end product development and optimization. All formulations are expressed in percent of product by weight as supplied.

#### Premium one-step solvent-based car rinse formulation

Rinse aid	% weight
Mineral Seal Oil (MSO)*	25.0
Arquad® 2C-72 PG surfactant	18.0
Ethomeen® T/15 surfactant	2.3
Ethomeen® T/25 surfactant	0.7
2-butoxyethanol	5.0
Water	49.0

\* Adjustment in the formulation may be required due to the variation in mineral seal oil

#### Method of preparation

1. Add Ethomeen® T/15 and Ethomeen® T/25 surfactants to Arquad® 2C-72 PG surfactant
2. Add Mineral Seal Oil and 2-butoxyethanol
3. Add DI water at a slow rate under constant mixing until a clear solution
4. Stir until homogenous

#### Two-step rinse formulations

##### Step one – Mineral Seal Oil base

MSO base blend	% weight
Mineral seal oil*	73.0
Ethomeen® T/15 surfactant	10.0
2-butoxyethanol	16.0
Ammonium hydroxide	1.0

\* Adjustment in the formulation may be required due to the variation in mineral seal oil

#### Method of preparation

1. Add Ethomeen® T/15 surfactant to Mineral Seal Oil
2. Add 2-butoxyethanol
3. Add Ammonium hydroxide
4. Stir until homogenous

##### Step two – Rinse aid

Rinse aid	% weight
MSO base blend	47.4
Arquad® 2C-72 PG surfactant	17.0
Water	35.6

#### Method of preparation

1. Add Arquad® 2C-72 PG surfactant to MSO blend (step 1)
2. Stir until well blended
3. Add water slowly and stir until a homogenous blend

Arquad® 2C-72 PG surfactant is a highly effective rinse aid emulsifier for vehicle cleaning that delivers enhanced vehicle drying.

This safe and easy to handle ingredient is non-flammable and remains a liquid even at low temperatures.

It helps rapidly bead water from the vehicle surface, allowing droplets to be blown free, leaving a streak-free shine on treated vehicle surfaces.

Contact us directly for detailed product  
information and sample request  
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# Nouryon

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