

Carspray™ 401

Automotive drying / rinse aid

- High flash point version of Carspray™ 400
- Excellent sheeting action for fast drying
- Does not require non-ionic surfactant to create micro emulsion
- Superior freeze/thaw stability
- Minimises spotting and streaking
- Premium blend optimised for best performance

Carspray™ 401 is a premier blend of surfactants for automatic car wash rinse aid formulations with high flash point.

Chemical and physical properties (not part of specification)

Appearance (25 °C/ 77 °F)	clear, amber coloured liquid
pH value (100% in iso-propanol/water)	6 - 10
Freeze/thaw recovery	excellent
Pounds/gallon (25 °C/ 77 °F)	7.6
Flash point (SETA)	> 93 °C (> 200 °F)

Properties

- high flash point
- excellent sheeting action for fast drying
- does not require non-ionic surfactant to create micro emulsion
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- minimises spotting and streaking
- premium blend optimised for best performance

Applications

Used in automatic car wash rinse / drying aid formulations as a superior emulsifier blend to promote sheeting action and increased drying efficiency. Also used in hand car washes as a spot-free post-rinse.

Formulation trouble shooting

Problem	Possible cause	Possible solution
Hazy or split formulation	Not enough coupler, i. e. butyl cellosolve	Continue mixing, adding coupler slowly, until formulation is clear
	Not enough emulsifier	Continue mixing, adding Carspray™ 401 slowly until formulation is clear, recommended Carspray™ 401 to oil ratio is 1 : 1 ----- If formula becomes thick, add more coupler, i. e. butyl cello solve, until thin
	Inadequate mixing	Mechanical agitation is recommended for best results
	Mineral seal oil specifications	Goldschmidt recommends the following seal oils: Witsol MSO (CK Witco), Semtol 40 (CK Witco), Kermac 600 (Calumet Lubes), Isopar V (Exxon) and Diala A (Shell Oil)

Packaging

708 kg pallet (4 drums 177 kg)
1 560 lbs pallet (4 drums 390 lbs)

Storage and processing recommendation

The product can be stored in sealed original package at temperatures between 20 °C (68 °F) and 25 °C (77 °F) for at least 6 months after date of delivery. At temperatures below 0 °C (32 °F) the product could be damaged.

Carspray™ 401 drying/rinse aid will recover after freezing without adversely affecting performance, simply allow it to come to room temperature and mix until homogeneous before using. Do not heat with open flame.

Please note

Slight modification to your final formulation may be necessary as the chain length distribution of the natural raw material stocks may vary.

Contact your local representative for more information on product safety.

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fires
- toxicity and ecological effects

is given in our material safety data sheets.

Guideline Formulations

Economy Carspray™ 401 concentrate

	% by weight
Carspray™ 401 ¹⁾	20
Ethylene glycol monobutyl ether ²⁾	5
Mineral seal oil ³⁾	25
Water	50

¹⁾ Goldschmidt Chemical Corporation

²⁾ Dowanol EB Dow Chemical Company

³⁾ Mineral seal oil – select one of the following:

Witsol MSO CK Witco Corporation

Semtol 40 CK Witco Corporation

Kermac 600 solvent Calumet Lubes

Isopar V Exxon Chemical

Blending procedure

Combine Carspray™ 401, ethylene glycol monobutyl ether and mineral seal oil in vessel and mix thoroughly. In a separate vessel weigh in the water. While mixing the water, pour the blended oils directly into the water vortex. Mix until solution is homogeneous.

There must be good mixing (good vortex) to emulsify easily. The quality of mixing will directly influence the ease of emulsion formation.

Use dilution (day-tank): 5 gallons concentrate to 50 gallons water.

Application rate: 2 – 50 ounces per car.

Edition: 06/2003

Legal References

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