



**ADVANCED POLYMER, INC.**

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## APS-328 GEL

APS-328 GEL is a highly concentrated, reactive silicone copolymer supplied as a viscous self-emulsifiable gel. The addition of APS-328 GEL to water with a small amount of agitation will produce a stable emulsion at any desired concentration.

### CHARACTERISTICS

- High Concentration
- Self-emulsifiable
- Minimal agitation is required to form a stable emulsion
- Softens and lubricates various textile substrates
- Produces excellent elastomeric properties when applied to textiles

### APPLICATION

- Prepared emulsions of 10% to 30% on a solids basis, have shown to be most desirable for textile applications. After the emulsion has been properly prepared, use 1.0% - 5.0% in the finishing bath to achieve the desired effects. Higher concentrations may be used if necessary.
- Concentrations of 1% - 3% are recommended for print paste applications.

### ADDITIONAL FORMULATIONS & APPLICATIONS

Water Based Vinyl & Tire Dressing	
Component	Amount (wt%)
Water	82-88
Acrysol TT-615 or equivalent	2
APS-328 Gel (imparts durability)	7-10
Daimul 60 (imparts lustrous shine)	5-8
<ul style="list-style-type: none"> <li>• Mix Acrysol TT-615 or Acrysol ASE-60 (Rohm &amp; Haas) and water. Thicken to the desired viscosity with an alkali (approx. 2% diethanol amine).</li> <li>• Slowly add APS-328 Gel and Daimul 60 with moderate agitation.</li> <li>• Wipe or spray onto surface.</li> <li>• Buff to produce a durable, lustrous shine.</li> </ul>	

### TYPICAL PROPERTIES

Appearance:	Clear to opaque gel
Ionic Characteristic:	Nonionic
Solid Content:	70%
pH (5% solution):	6.9
Specific Gravity (@ 25°C):	0.997
Volatile Organic Content:	0.2%

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## APS-328 GEL

### ADDITIONAL FORMULATIONS & APPLICATIONS continued

WATER BASED PASTE WAX				
The function of the aminosilicone (APS-328 Gel) is to provide shine, leveling, water repellency and durability.				
Component	Function	Amount (wt%)	Supplier	Phone
APS-328 Gel	Amino Silicone	5%	API	(201) 933-0600
APW-315	Wax	12%	API	(201) 933-0600
Armac HT	Clay	2%	Armac Industries	(888) 277-9636
Carbopol 981 or Acrysol ASE 60	Thickener	2%	Noveon Rohm & Haas	(216) 447-5000 (800) 874-6917
Water		79%		

Use either Carbopol 981 or Acrysol ASE 60, or a comparable thickener. API recommends thickening the water with an alkali prior to the addition of the remaining ingredients.

### PACKAGING

APS-328 GEL is available in 8 oz. samples and 441-lb drums.

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#### I want to know more!

[technical@advpolymer.com](mailto:technical@advpolymer.com)

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Revised March 31, 2010

## APS-328 GEL

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### Section I Product Identity

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Product Name: APS-328 GEL  
Chemical Name/Family: Reactive amino modified silicone elastomeric emulsion  
CAS Registry: NA Mixture  
24 Hour Emergency Number 800-424-9300  
24 Hour Chemtrec Number 800-424-9300

All ingredients are listed in EPA's TSCA list of chemical substances

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### Section II Hazardous Components/Composition Information

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#### CHEMICAL

CAS #:	OSHA PEL (TWA):	ACGIH TLV:	PERCENT: 100
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### Section III Physical and Chemical Properties

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Boiling Point	208°F
Specific Gravity (H <sub>2</sub> O=1)	0.96
Vapor Pressure	20 @ 20°C
Vapor Density (Air=1)	>1
Percent Volatile By Weight	30
Evaporation Rate (BuAc=1)	Neg.
Solubility in Water	Soluble, forms an emulsion
Volatile Organic Content	0.2% or 1.9 grams/liter
Appearance and Odor	Clear to slightly yellow gel with mild odor.

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### Section IV Fire and Explosion Hazard Data

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Flash Point (Method Used)	>200°F
Flammable Limits in Air (% By Volume)	N.D.
Extinguishing Media	Water Spray, Foam, Dry Chemical, CO <sub>2</sub> .
Special Fire Fighting Procedures:	Evacuate personnel to a safe area. A self-contained breathing apparatus and protective clothing must be worn in fighting fires involving chemicals.
Unusual Fire and Explosion Hazard	None

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## Section V Reactivity Data

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Stability	Stable
Conditions to Avoid	Store in a well-ventilated place at temperatures below 120°F. Keep container tightly closed. Keep from freezing
Incompatibilities	Avoid contact with strong oxidizing agents and acids. Aluminum at high temperatures.
Hazardous Decomposition or By Products	Combustion may produce CO <sub>2</sub> , CO and nitrous oxides.
Hazardous Polymerization	May Not Occur

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## Section VI Health Hazard Data

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Primary Routes of Entry	Inhalation: No	Dermal: Yes	Ingestion: Yes
Acute Health Hazard	No information available		
Chronic Health Hazard	No information available		
Carcinogenicity	No information available		
NTP: No	IARC Monograph: No	OSHA Regulated: No	

### Signs and Symptoms of Exposure:

Skin Contact	Prolonged and repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis.
Eye Contact	Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product.
Ingestion	Although ingestion is unlikely, liquid would irritate upper digestive tract if swallowed.
Inhalation	Exposure to high vapor concentrations may cause eye and respiratory tract irritation, headache, dizziness, nausea, impairment of coordination, drowsiness and loss of consciousness.

### Medical Condition Generally Aggravated by Exposure

No information available.

### Emergency First Aid Procedures

Eyes	Immediately flush eyes with plenty of water. Seek medical attention.
Skin	Immediately wash with soap and water. Wash contaminated clothing before reuse.
Ingestion	Do not induce vomiting. Do not give anything by mouth to an unconscious person. Call a physician.
Inhalation	Immediately remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Please note: Symptoms may be delayed; prompt medical attention may be required. Call a physician.

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## Section VII Precautions for Safe Handling and Use

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Steps to be Taken in Case the Material is Released or Spilled:

Soak up with sawdust, sand, oil dry or other absorbent material..

Waste Disposal Method:

As in accordance with EPA and local regulations.

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## Section VIII Special Precautions

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Storage Conditions:

Store in a well-ventilated place at temperatures below 120°F. Keep container tightly closed. Keep from freezing. **\*\*\*Agitate contents of container before using\*\*\***

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## Section IX Control Measures

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### Respiratory Protection

Ventilation	Local exhaust	Not required
	Mechanical	
	Special	
	Other	
Eye Protection	Safety glasses should be worn	
Protective Gloves	Rubber or plastic gloves should be worn	
Protective Clothing	Rubber apron	
Other Protective Equipment	NIOSH approved respirator as needed	
Other Precautions	Wash hands thoroughly after handling material	

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## Section X SARA Title III

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### SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of SECTION 331 of the EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 and of 40 CFR 371

CAS #

Chemical Name

Percent by Weight

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL:

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## Section XI Transportation Information

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### SHIPPING INFORMATION

APS-328 GEL is not regulated by DOT

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## Hazard Ratings

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Health	1
Flammability	1
Reactivity	0

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Date Prepared ..... October 17, 2005

Prepared By ..... API

Date Revised ..... March 31, 2010

Revised By ..... API

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