

# HOMOGENEOUS Platinum Catalysts

S P E C I A L T I E S

# SPECIALTIES

# **PLATINUM CATALYSTS**

UCT Specialties platinum catalysts are homogeneous (i.e. soluble in the reaction medium). These catalysts are preferable to heterogeneous catalysts (i. e. insoluble), in that homogeneous catalysts do not depend on irregular surface effects for their activity.

### Advantages of Hydrosilylation Cure Systems over...

## **Condensation Cure (Tin and Zinc catalyzed) Systems**

- Wider range of curing temperatures: room to > 100°C
- Lower catalyst concentrations (5-30 ppm vs. 100-300 ppm)
- No volatile byproducts
- Smoother reaction profiles

## **Peroxide Cure Systems**

- Lowest cure temperature possible
- No acidic byproducts (e.g., benzoic acid from benzoyl peroxide cure)
- No "frothing" from oxygen byproduct
- No oxidative degradation of cured elastomer

PLATINUM CATALYSTS OFFERED BY UCT SPECIALTIES						
Description	Application	Part No.	Min. Pt Weight			
Platinum Divinyl Complex, platinum concentration in xylene, Neutral	Highest reactivity, for room temperature addition cure.	PC072	2% Pt			
	Optically clear, highest reactivity, for applications where cured silicones require High transparency.	PC074	2% Pt			
Platinum Divinyl Complexes, platinum	Intermediate reactivity, useful for slow room temperature	PC075	2% Pt			
concentration in vinyl terminated		PC075.3	3% Pt			
polydimethylsiloxane, Neutral	cures and moderate (30-100°C) higher temperature cures	PC076	1% Pt			
Platinum Cyclovinyl Complexes, platinum concentration in cyclic vinylmethylsiloxanes, Neutral	Lower reactivity, for high temperature (>100°C) extruded silicone formulations.	PC085	2% Pt			
Platinum Octanol / Octanal Complexes, platinum concentration in Octanol / Octanal	Low reactivity, for high temperature ( >100°C) extruded silicone formulations. Useful as fire retardant in silicone resins.	PC088.3	2% Pt			



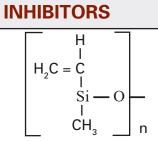
# **PRODUCTS FOR USE WITH UCT SPECIALTIES CATALYSTS**

	HYDROSILICONES						
Part No.	Viscosity	Methyl Hydro (Mole %)	Specific Gravity	Refractive Index	Flash Point	Application	
	Polymethylhydrosiloxane, Trimethylsilyl (Terminated)						
PS118	2-5	100%	0.90	1.382	50°C	Blowing agent	
PS119	18-24	100%	0.99	1.395	100°C		
PS120	15-40	100%	0.99	1.395	150°C	crosslinkers	
IV	Methyl Hydro, Dimethylsiloxane Co-polymer, Trimethylsilyl (Terminated)						
PS122.5	10-15	(50-55%)	0.99	1.394	70°C	RTV crosslinkers for addition cure Pt catalyzed systems	
PS123	25-30	(30-35%)	0.99	1.399	125°C		
PS123.5	25-35	(15-18%)	0.99	1.400	>94°C		
PS123.8	7.5K ± 2.5K	(0.5-1.0%)	0.97	1.404	300°C		
PS124.5	250-275	(3-4%)	0.97	1.404	>66°C		

VINYL FLUIDS						
Part No.	Viscosity	Vinyl (Weight %)	Specific Gravity	Primary Use in RTV Addition Cure Systems		
Polydimethylsiloxane, Vinyldimethyl (Terminated)						
PS441	100	0.8-1.2	0.97			
PS441.2	200	0.4-0.6	0.97	Base polymers, or part of a polymer blend of liquid RTV systems		
PS442	500	0.37-0.43	0.97			
PS443	1,000	0.18-0.26	0.97			
PS444	5,000	0.10-0.13	0.97			
PS445	10,000	0.08-0.12	0.97	High strength RTV systems		
PS447.6	65,000	0.03-0.07	0.97			
PS448	100,000	0.054	0.97			
PS448.5	165,000	0.03-0.04	0.97	Main polymers for high consistency RTV systems		
PS449	600,000	0.01	0.98			
Vinyl Q-resin Dispersion						
PS496	4000-6000		1.02	High strength RTV systems, reinforcer		

$$\begin{array}{ccc} CH_{3} & CH_{3} \\ I & I \\ H_{2}C = CH - Si - O - Si - CH = CH_{2} \\ I & I \\ CH_{3} & CH_{3} \end{array}$$

**D6210** 1,3-Divinyltetramethyldisiloxane



**PS925** Cyclic Vinyl Methyl Siloxanes

cyclotetrasiloxane

#### PRICES AND TERMS

Our prices are subject to change without notice. The price in effect when we receive your order will apply. All prices are in US Dollars and are F.O.B. Bristol, PA 19007. Terms of payment are net 30 days.

#### **MINIMUM ORDERS**

We welcome all orders, therefore, we do not have a minimum order requirement. When ordering, please include your purchase order number, complete "Ship To" and "Bill To" address, catalog number, quantity, and description of product(s). Also include your name and a phone number where you can be reached should we have any questions concerning your order.

#### SHIPMENTS

Normal process is shipment within one business day after receipt of an order if material is in stock. Unless special shipping arrangements are made, all orders will be sent via Federal Express Ground. Shipping and handling charges (freight, insurance, hazardous materials fee) will be added to the invoice unless requested by the customer.

#### **SPECIAL PRICING**

We offer special pricing for volume purchases and standing orders. Please call a sales representative for more information on special pricing qualifications.

#### **RETURN POLICY**

Our sales staff will process your return. Before returning merchandise, please call to obtain a return authorization number from a sales representative. We will need to know the reason for the return, date of purchase, purchase order number, invoice number, catalog number and lot number of product returned in order to issue a return authorization number.

#### WARRANTY

All products manufactured by UCT are guaranteed against defects in materials and workmanship for a period of 90 days after shipment. UCT will replace any items that prove to be defective during this time period. The exclusive remedy requires the end user to first advise UCT of the defective product by phone or in writing and must include order number, the lot number and the shipping date.

To initiate this action, photographs of the product, including packaging and labeling of the containers, must be submitted to the UCT Representative for approval. With approval a return authorization can be initiated, and must be received within 30 days. Once the materials arrive at UCT a further inspection of the materials must be completed and accepted by our Quality Manager prior to further action of credits or replacement. UCT's total liability is limited to the replacement cost of UCT products.

This warranty does not apply to damage resulting from misuse.

#### **Contact Us**

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