Conductivity Data												
Description	Conductivi	Conductivity (md-ft)										
Closure Stress, MPa (psi)	14 (2,000)	28 (4,000)	41 (6,000)	55 (8,000)	69 (10,000)							
Curable Sands												
Prime Plus <sup>™</sup> Premium resin coated sand for high conductivity and proppant flowback control	Tested at 12	Tested at 121°C (250°F)										
16/30	9,045	6,698	2,955	1,358	454							
20/40	5,586	4,762	2,190	1,191	483							
30/50	1,807	1,752	1,461	987	469							
40/70	995	865	856	538	309							
SB Excel <sup>™</sup> Resin coated sand for high conductivity and proppant flowback control	Tested at 12	Tested at 121°C (250°F)										
20/40	4,630	3,873	2,357	1,031	—							
Yukon Black™ Resin coated sand for low temperature bonding without a consolidation aid	Tested at 66	Tested at 66°C (150°F)										
16/30	8,631	5,202	2,397	1,069	-							
20/40	3,297	2,923	2,342	1,133	—							
SiberProp™ Resin coated sand for low temperature bonding without a consolidation aid	Tested at 66	Tested at 66°C (150°F)										
16/30	5,089	4,125	2,657	1,226	-							
20/40	2,816	2,339	1,625	901	-							
<b>kRT</b> <sup>™</sup> Resin coated sand for ehanced conductivity and proppant flowback control	Tested at 12	Tested at 121°C (250°F)										
16/30	7,967	5,758	1,910	670	296							
20/40	5,471	3,451	1,934	633	282							
30/50	2,790	1,828	1,524	623	302							
40/70	1,191	1,103	711	384	163							
100	698	431	283	127	65							
Precured Sand												
PR6000 <sup>™</sup> Precured resin coated sand	Tested at 12	Tested at 121°C (250°F)										
16/30	6,259	5,155	3,046	1,302	336							
20/40	4,949	4,054	2,577	1,254	418							
30/50	2,723	2,214	1,513	720	312							
40/70	1,339	991	665	278	132							

## Responsible Chemistry

## Resin Coated Proppants



Note: Data generated by PropTester, Inc. and Stim-Lab, Inc. using API Long-term Baseline Procedure at temperature and 2 lb/ft<sup>2</sup> proppant concentration.

## For more information, visit hexion.com/oilfield

© 2018 Hexion Inc. All rights reserved.

(®, ™ and <sup>sM</sup> denote trademarks owned or licensed by Hexion Inc.

The information provided herein was believed by Hexion Inc. ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product or its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. HEXION MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HEXION, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product. **Customer Service and Technical Support** 

- +1 800 626 2116 phone
- +1 866 959 2899 fax

otg.customerservice@hexion.com



Responsible Chemistry

## **Oilfield Technology Group** Calgary, Alberta, Canada

Calgary, Alberta, Canada +1 403 705 0950 hexion.com/oilfield fracline.com



Physical Properties Resin Coated Proppants

		Water Manage	ment		Oil Production Enhancement				Premium Curable Sand				Intermediate Curable Sand	Low Temperature Curable Sands					Econimi Curable			Precured Sand					
			AquaBond™ Formation Water Reduction Technology Advanced resin system that reduces the production of formation water			CiPlus™ Premium Resin Coated Sand Increases the relative permeability to oil in the proppant pack, resulting in higher oil production			Frime Plus Premium Resin Coated Sand			SB Excel Intermediate Resin Coated Sand	sin Vukon Black Ultra-Low Temperature Resin Coated Sand			SiberProp KRT   Low Temperature KRT   Resin Coated Sand Coated Sand						PR6000 Precured Resin Coated Sand					
Mesh Size		20/40	30/50	40/70	16/30	20/40	30/50	40/70	16/30	20/40	30/50	40/70	20/40	16/30	20/40	30/50	16/30	20/40	16/30	20/40	30/50	40/70	100	16/30	20/40	30/50	40/70
Typical Closure Stress	MPa (psi)		69 (10,000)		55 69 (8,000) (10,000)			69 (10,000)		83 (12,000)		55 (8,000)		55 (8,000)		55 (8,000)				83 (12,000)	55 69 (8,000) (10,000)						
Typical Temperature Range	°C (°F)		49–232 (120–450	)		49–232 (120–450)			54–232 (130–450)		43–232 (110–450)		71–232 (160–450)	24–71 54–232 (75–160) (130–450			60-232   43-232     (140-450)   (110-450)					21–232 (70–450)					
Typical AcTivator™ Consolidation Aid Temperature Requirements*	°C (°F)	N/A			< 49 (120)				< 54 (130) <		< 43	(110)	< 71 (160)	< 24 (75)		< 54 (130)		< 43 (110)				N/A					
Median Particle Diameter	mm	0.654	0.440	0.315	0.912	0.618	0.438	0.304	0.840	0.662	0.451	0.299	0.638	0.781	0.621	0.457	0.910	0.639	0.820	0.666	0.475	0.353	0.202	0.839	0.636	0.450	0.354
Specific Gravity		2.56	2.55	2.59	2.61	2.56	2.60	2.59	2.59	2.63	2.60	2.59	2.59	2.56	2.58	2.59	2.55	2.57	2.62	2.61	2.62	2.62	2.61	2.60	2.59	2.61	2.59
Pipe Fill Factor	cm³/g gal/lb	0.625 0.0749	0.662 0.0793	0.685 0.0821	0.680 0.0815	0.685 0.0821	0.690 0.0827	0.690 0.0827	0.653 0.0782	0.680 0.0813	0.690 0.0826	0.690 0.0826	0.685 0.0821	0.671 0.0806	0.662 0.0794	0.686 0.0823	0.637 0.0763	0.641 0.0768	0.665 0.0796	0.641 0.0768	0.694 0.0832	0.714 0.0855	0.704 0.0840	0.624 0.0748	0.637 0.0763	0.633 0.0759	0.699 0.0838
Specific Volume	cm³/g gal/lb	0.391 0.0469	0.392 0.0470	0.386 0.0463	0.383 0.0459	0.391 0.0469	0.385 0.0461	0.386 0.0463	0.386 0.0463	0.380 0.0455	0.385 0.0461	0.386 0.0463	0.386 0.0463	0.390 0.0467	0.388 0.0465	0.386 0.0462	0.392 0.0469	0.389 0.0465	0.381 0.0457	0.383 0.0459	0.382 0.0458	0.382 0.0458	0.383 0.0459	0.384 0.0460	0.386 0.0463	0.383 0.0459	0.0386 0.0463
Bulk Density	g/cm³ lb/gal	1.60 13.4	1.51 12.6	1.46 12.2	1.47 12.3	1.46 12.2	1.45 12.1	1.45 12.1	1.53 12.8	1.47 12.3	1.45 12.1	1.45 12.1	1.46 12.2	1.49 12.4	1.51 12.6	1.46 12.2	1.57 12.5	1.56 13.0	1.50 12.6	1.56 13.0	1.44 12.0	1.40 11.7	1.42 11.9	1.60 13.4	1.57 13.1	1.58 13.2	1.43 11.9
Acid Solubility	(weight %)		≤ 0.3 ≤ 0.3					≤ 0.3				≤ 0.3	≤ 0.3			≤	0.3	≤ 0.3				≤ 0.3					

Note: Data listed was generated by Hexion laboratory testing. Results may vary based on sample collection variability. Hexion proppants are compatible with most commonly used fracturing fluids. Testing with fluids prior to pumping is advised. Some fluids may require adjustment of pH control, breaker, or foamer loading. Avoid prolonged exposure to highly alkaline fluids (pH > 12).

\*For optimized AcTivator consolidation aid recommendations, contact a Hexion sales representative or oilfield@hexion.com.