

**UNION
CARBIDE**

INTERNAL CORRESPONDENCE

RECEIVED

JUN 13 1974

R. N. WHEELER, JR.

CHEMICALS AND PLASTICS

TO (NAME) Mr. M. E. Eisenhower
COMPANY
LOCATION TEXAS CITY PLANT

DATE June 6, 1974

COPY TO
Dr. W. B. Ackart - 312
Dr. C. E. Colwell - 525
R. L. Frantz
R. E. Graebert - 511
R. J. Hanna - 511
F. L. Johnson
R. W. Sesler
G. T. Scott
Dr. A. B. Steele - 501
G. F. Tacquard
~~R. N. Wheeler - 514~~
Dr. N. L. Zutty - 501

SUBJECT Residual Vinyl Chloride Content of
Suspension/Non-Solvent Vinyl Resins

*VC
in resin*

Attached in Tables I-VI is the residual vinyl chloride monomer content of the suspension/non-solvent vinyl resins blends produced during the month of May. The QSAN-7/QSQH-7 blends produced during the latter part of the month reflect the production unit's attempt to reduce the VCM content to the lowest achievable concentration with present equipment and technology. Complete results of this study will be made in a separate report. The data indicate the continued difficulty in maintaining a VCM content of <1000 ppm in resins having a glassy, low porosity particle character, i.e., QSAE, QSAH-7, QSOF-7 and VSKK-10. The higher porosity of the QSQH-7 PVC-ethylene copolymer, as compared to QSAH-7, results in a much lower VCM content.

RMA
R. M. Arnold

RMA/ba

ATTACHMENTS

UCC
038668

TABLE I

ANALYSIS OF QSAN-7 SUSPENSION VINYL RESIN FOR RESIDUAL VCM

<u>BLEND NUMBER</u>	<u>DATE</u>	<u>CONTAINER</u>	<u>VCM, PPM</u>	<u>BLEND NUMBER</u>	<u>DATE</u>	<u>CONTAINER</u>	<u>VCM, PPM</u>
B-5081	April, 1974	55233-A	170	B-5177	May, 1974	301	118
		B	1032	B-5180		780	595
B-5092		54521-A	361	B-5184		55090-A	360
		CA	1086			CA	525
		CB	142			CB	338
		B	293			B	203
B-5108		57011-A	130	B-5185			105
		CA	288	B-5187		57100-A	460
		CB	56			CA	494
		B	531			CB	352
B-5109		665	438			B	406
B-5125		57101-A	161	B-5189		57101-A	584
		CA	340			CA	314
		CB	145			CB	534
		B	851			B	136
B-5127		668	812	B-5190		541	127
B-5128		730	810	B-5191		490	1160
B-5132	May, 1974	689	260	B-5192		590	172
B-5133		168	355	B-5193		372	1368
B-5135		672	261	B-5195		582	428
B-5139		57058-A	285	B-5197		55165-A	976
		CA	210			CA	623
		CB	27			CB	534
		B	210			B	136
B-5141		762	136	B-5199		53104-A	73
B-5143		186	1076			CA	151
B-5145		678	898			CB	322
B-5149		631	130			B	505
B-5152		496	208	B-5200		54517-A	413
B-5156		761	832			CA	320
B-5161		334	85			CB	360
B-5165		757	189			B	347
B-5168		768	131	B-5201		532	397
B-5171		807	57	B-5202		841	73
B-5174		665	227				
B-5203		57065-A	162	B-5231		52050-A	401
		CA	120			CA	145
		CB	57			CB	116
		B	71			B	115

UCC
038669

TABLE 1 (Continue)
Page 2

<u>BLEND NUMBER</u>	<u>DATE</u>	<u>CONTAINER</u>	<u>VCM, PPM</u>	<u>BLEND NUMBER</u>	<u>DATE</u>	<u>CONTAINER</u>	<u>VCM, PPM</u>
B-5204	May, 1974	628	334	B-5236	June, 1974	657	179
B-5207		574	357	B-5237		57011-A	189
B-5208		57117-A	212			CA	665
		CA	180			CB	756
		CB	116			B	166
		B	156	B-5239			439
B-5209		57030-A	201	B-5240		770	289
		CA	259				
		CB	384				
		B	692				
B-5210		55251-A	177				
		CA	111				
		CB	52				
		B	199				
B-5211		599	316				
B-5212		787	462				
B-5213		532	363				
B-5214		621	101				
B-5215		863	173				
B-5216		616	162				
B-5217		566	246				
B-5219		785	228				
B-5221		845	300				
B-5223		626	335				
B-5224		711	228				
B-5225		493	199				
B-5226		375	329				
B-5227		293	305				
B-5229		54518-A	130				
		CA	145				
		CB	230				
		B	139				

UCC
038670

TABLE II

ANALYSIS OF QSQH-7 SUSPENSION VINYL RESIN FOR RESIDUAL VCM

<u>BLEND NUMBER</u>	<u>DATE</u>	<u>CONTAINER</u>	<u>VCM, PPM</u>	<u>BLEND NUMBER</u>	<u>DATE</u>	<u>CONTAINER</u>	<u>VCM, PPM</u>
B-708	April, 1974	352	270	B-768	May, 1974	392	505
B-709		341	268	B-770		615	837
B-716		486	362	B-772		340	744
B-711		304	499	B-774		362	250
B-712		573	1007	B-776		582	291
B-713		307	155	B-778		579	159
B-714		273	199	B-780		613	515
B-715		856	911	B-782		705	211
B-719		57125(composite)	545	B-784		668	225
B-724		866	678	B-786		608	249
B-725		729	628	B-788		279	110
B-726		727	321	B-790		569	242
B-727		711	835	B-791		622	144
B-728		594	208	B-792		727	160
B-729		209	202	B-794		521	130
B-730	May, 1974	553	999				
B-731		789	267				
B-732		309	708				
B-733		129	358				
B-734		779	369				
B-736		479	160				
B-737		821	396				
B-738		707	1022				
B-740		500	852				
B-742		191	231				
B-744		292	161				
B-746		670	115				
B-748		339	220				
B-750		495	497				
B-752		165	235				
B-754		691	142				
B-756		358	227				
B-760		711	500				
B-762		836	385				
B-764		492	420				
B-766		364	275				

UCC
038671

TABLE III
ANALYSIS OF QSOF-7 SUSPENSION VINYL FOR RESIDUAL VCM

<u>BLEND NUMBER</u>	<u>DATE</u>	<u>CONTAINER</u>	<u>VCM, PPM</u>
B-220	May, 1974	372	760
B-221		581	1270
B-222		534	772
B-223		491	1197
B-224		204	903
B-225	June, 1974	611	640
B-227		590	746
B-229		855	615
B-231		777	860
B-233		883	558
B-235		755	2174
B-237		340	838
B-234			828
B-236		811	830

UCC
038672

TABLE IV
ANALYSIS OF QSAH-7 SUSPENSION VINYL RESIN FOR RESIDUAL VCM

<u>BLEND NUMBER</u>	<u>DATE</u>	<u>CONTAINER</u>	<u>VCM, PPM</u>
B-1625	May, 1974	573	1310
B-1627		866	1379
B-1629		352	592
B-1631		583	1199
B-1633		842	2085
B-1635		890	1535
B-1637		318	2734
B-1639		758	922
B-1641		280	682
B-1643		556	549
B-1645		897	808
B-1647		314	719
B-1649		581	348
B-1651		694	973
B-1653		209	767
B-1655		793	1218
B-1637		872	1187
B-1659		776	1160
B-1661		254	1411
B-1663		534	927

UCC
038673

TABLE V
ANALYSIS OF VSKK-10 SUSPENSION VINYL RESIN FOR RESIDUAL VCM

<u>BLEND NUMBER</u>	<u>DATE</u>	<u>VCM, PPM</u>
B-729	May, 1974	1128
B-735		1002
B-736		1043
B-738		1595
B-740		1046
B-742		860

UCC
038674

TABLE VI
ANALYSIS OF QYNA NON-SOLVENT VINYL RESIN FOR RESIDUAL VCM

<u>BLEND NUMBER</u>	<u>DATE</u>	<u>VCM, PPL</u>
B-1910	April, 1974	<1.5
B-1913		<1.5
B-1914		<1.5
B-1915		4
B-1916	May, 1974	30
B-1917		<1.5
B-1918		<1.5
B-1920		<1.5

UCC
038675