

name MW bp/mm (mp) D_4^{20} n_D^{20}

SUBSTRATES

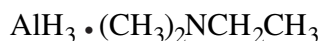


W-ALO-51-50
ALUMINUM OXIDE WAFER 101.96 (2053°)mp (C-axis):1.768
SAPPHIRE 51mm (2 inch) x 0.5mm wafer
single side polished (epi quality) C-axis
birefringence: -0.008 volume resistivity, 25°: 10¹⁶Ω-cm
hardness, Mohs: 9
[1302-74-5] TSCA HMIS: 0-0-0-X each/\$195.00

COMPOUNDS

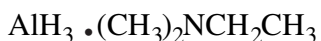
METALLIZATION

OMAL005
ALANE-DIMETHYLETHYLAMINE COMPLEX 103.12 50-5°/0.05 0.78
H₃Al•C₄H₁₁N DMEAA (11°)mp
PYROPHORIC
employed in CVD of aluminum^{1,2}.
1. T. Jang et al, Thin Solid Films, 333, 137, 1998
2. Y. Neo et al, Appl. Surf. Sci., 142, 443, 1999
HYDROLYTIC SENSITIVITY: 10 reacts extremely rapidly with moisture and oxygen
pyrophoric- glove box or sealed system required
[124330-23-0] TSCA HMIS: 4-4-2-X 25g/\$320.00+bubbler or cylinder




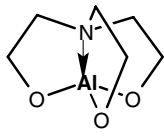

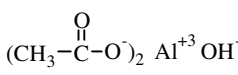

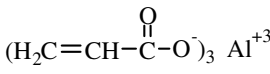

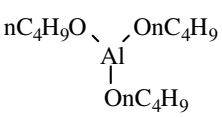

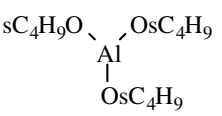

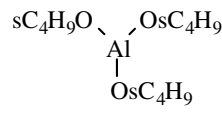

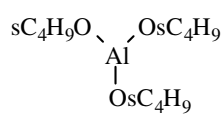
METALLIZATION

OMAL006
ALANE-DIMETHYLETHYLAMINE COMPLEX 103.12 0.837
0.5M in toluene flashpoint: -20°C(-4°F)
H₃Al•C₄H₁₁N
HYDROLYTIC SENSITIVITY: 10 reacts extremely rapidly with moisture and oxygen
may be pyrophoric- glove box or sealed system required
[124330-23-0] TSCA HMIS: 4-4-2-X 25g/\$42.00 100g/\$136.00



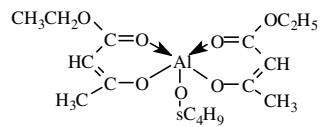
METALLIZATION
DIELECTRIC CERAMIC

OMAL008
ALANE-TRIMETHYLAMINE COMPLEX 89.01 (76°)mp
H₃Al•C₃H₉N TMAA PYROPHORIC
decomp: >80°
employed in CVD of aluminum¹.
employed in chemical beam epitaxy of aluminum nitride.
1. J. Foord et al, J. Chem. Soc. Chem. Comm., 11, 1990.
2. J. Glass et al, J. Phys. Chem. Solids, 57, 563, 1996.
HYDROLYTIC SENSITIVITY: 10 reacts extremely rapidly with moisture and oxygen
may be pyrophoric- glove box or sealed system required
[16842-00-5] TSCA HMIS: 4-4-2-X 5.0g/\$90.00 25g/\$360.00

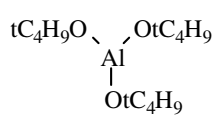
	name	MW	bp/mm (mp)	D ₄ ²⁰	n _D ²⁰
	AKA005 ALUMATRANE tech-90 C ₆ H ₁₂ NO ₃ Al moisture, air stable alumina precursor ¹ . 1. R. Laine et al, J. Chem. Mater. 6, 1441, 1996 HYDROLYTIC SENSITIVITY: 4 no reaction with water under neutral conditions [21863-06-9] HMIS: 2-1-0-X	173.15	280°/13-sub soluble: ethanol, toluene	1.05	
		25g/\$26.00	100g/\$84.00		
	CXAL011 ALUMINUM ACETATE, BASIC HYDROXYALUMINUM DIACETATE C ₄ H ₇ O ₅ Al HYDROLYTIC SENSITIVITY: 4 no reaction with water under neutral conditions [142-03-0] TSCA HMIS: 1-0-0-X	162.08			
		100g/\$14.00	2kg/\$160.00		
ALUMINUM ACETYLACETONATE- see AKA080 ALUMINUM PENTANEDIONATE					
	CXAL015 ALUMINUM ACRYLATE C ₉ H ₉ O ₆ Al paper treatment for high resolution ink-jet recording ¹ . 1. M. Hirose et al, JP 94-263716; CA 125:154444 HYDROLYTIC SENSITIVITY: 3 Al-OOC reacts with aqueous base [15743-20-1] TSCA HMIS: 3-1-0-X store <5°	240.15			
		25g/\$46.00			
	AKA010 ALUMINUM n-BUTOXIDE tech-90 C ₁₂ H ₂₇ O ₃ Al molecular complexity: 3.9 HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [3085-30-1] TSCA HMIS: 2-1-1-X	246.32	242°/0.7 (102°)mp ΔHvap: 29.9 kcal/mole		
		10g/\$35.00	50g/\$140.00		
	AKA020 ALUMINUM s-BUTOXIDE, 96% C ₁₂ H ₂₇ O ₃ Al molecular complexity: 2.4 employed in preparation of alumina sols and ceramers ^{1,2} and cordierites ³ . primer for adhesives on mild steel ⁴ . 1. B. Wang et al, Polymer Preprints, 30, 146, 1989. 2. A. Aryal et al, "Better Ceramics Through Chemistry III" ed Brinker, MRS, 1989, p239. 3. M. Okuyama, J. Mater. Res., 7, 280, 1992 4. B. Menon et al in "Silanes & Other Coupling Agents" ed. K. Mittal, VSP, 1993, p569. HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [2269-22-9] TSCA HMIS: 2-3-1-X	246.32	200-6°/30 flashpoint: 27°C (82°F) ΔHvap: 21.5 kcal/mole	0.9671	1.438
		250g/\$10.00	2.0kg/\$60.00	16kg/\$168.00	
	AKA020.1 ALUMINUM s-BUTOXIDE, 99+% C ₁₂ H ₂₇ O ₃ Al HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [2269-22-9] TSCA HMIS: 2-3-1-X	246.32	200-6°/30 flashpoint: 27°C (82°F)	0.9671	1.438
		250g/\$48.00			
	AKA020.5 ALUMINUM s-BUTOXIDE, 75% in s-butanol C ₁₂ H ₂₇ O ₃ Al low viscosity solution for convenient handling HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [2269-22-9] TSCA HMIS: 2-3-1-X	246.32	200-6°/30 flashpoint: 27°C (82°F)	0.907	
		250g/\$12.00	1.5kg/\$56.00		

PLEASE INQUIRE ABOUT BULK QUANTITIES

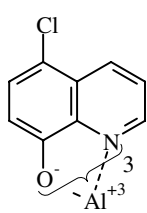
POLYMERIZATION



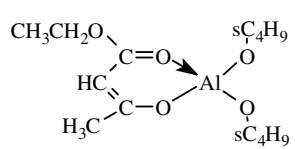
CATALYSIS



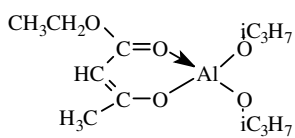
LIGHT INTERACTION



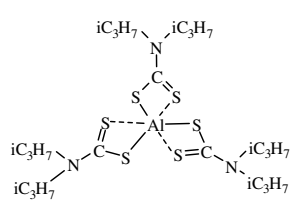
DIELECTRIC CERAMIC



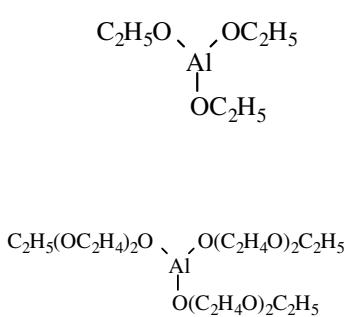
POLYMERIZATION
DIELECTRIC CERAMIC



DIELECTRIC CERAMIC

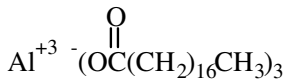


DIELECTRIC CERAMIC



name	MW	bp/mm (mp)	D ₄ ²⁰	n _D ²⁰
AKA023 ALUMINUM s-BUTOXIDE BIS(ETHYL-ACETOACETATE) tech-95 C ₁₆ H ₂₇ O ₇ Al crosslinker for powder coatings HYDROLYTIC SENSITIVITY: 7 reacts slowly with moisture/water [93918-06-0] HMIS: 3-2-1-X	358.39	flashpoint: 77°C (171°F) viscosity: 90-110 cSt	1.10	
AKA030 ALUMINUM t-BUTOXIDE C ₁₂ H ₂₇ O ₃ Al molecular complexity: 2.0 catalyst for Oppenauer oxidation of alcohols to ketones ^{1,2} . reacts w/AlCl ₃ by non-hydrolytic method to form aluminum oxide ³ . 1. C. Djerassi, "The Oppenauer Oxidation," Org. Reactions, 6, 207, 1951 2. R. Oppenauer, Org. Syn., Coll. Vol. 3, 207, 1955 3. S. Acosta et al, J. Non-Crystalline Solids, 170, 234, 1994 HYDROLYTIC SENSITIVITY: 7 reacts slowly with moisture/water [556-91-2] TSCA HMIS: 2-2-0-X	246.32	156°/2 (241-6°)mp ΔHvap: 21.6 kcal/mole		50g/\$120.00
AKA036 ALUMINUM 5-CHLORO-8-HYDROXYQUIN-OLINATE C ₂₇ H ₁₅ Cl ₃ N ₃ O ₃ Al employed in organic LED displays; shifts current voltage response to lower voltage ¹ . 1. M. Matsumura et al, Jpn. J. Appl. Phys., Part 1, 35, 5357, 1996. HYDROLYTIC SENSITIVITY: 4 no reaction with water under neutral conditions [41584-66-1] HMIS: 3-1-0-X	562.78	(390°)mp UV max: 405nm soluble: chloroform		5.0g/\$220.00
AKA040 ALUMINUM DI-s-BUTOXIDE ETHYL-ACETOACETATE tech-90 C ₁₄ H ₂₇ O ₅ Al in combination with CsOAc and (EtO) ₄ Si forms stable pollucite ceramics ¹ . in combination with (EtO) ₄ Si and LiNO ₃ forms β-spodumene ² . component in rhodamine and coumarin doped fluorescent sol-gel ceramics ³ . 1. M. Hogan et al, J. Mat. Res., 6, 217, 1991. 2. H. Jang et al, J. Mat. Res., 7, 2273, 1992. 3. S. Dire et al, J. Mat. Chem., 2, 239, 1992. HYDROLYTIC SENSITIVITY: 7 reacts slowly with moisture/water [24772-51-8] TSCA HMIS: 2-2-1-X	302.34		1.03	500g/\$56.00
AKA050 ALUMINUM DIISOPROPOXIDE-ETHYLACETOACETATE C ₁₂ H ₂₃ O ₅ Al monomer for polymeric aluminates ¹ . 1. T. Patterson et al, J. Am. Chem. Soc., 81, 4213, 1959 HYDROLYTIC SENSITIVITY: 7 reacts slowly with moisture/water [14782-75-3] TSCA HMIS: 2-2-1-X	274.49	flashpoint: 50°C (122°F) viscosity, 20°: 1000-1200 cSt	1.05	500g/\$56.00
AKA054 ALUMINUM DIISOPROPYLDITHIOCARBAMATE C ₂₁ H ₄₂ N ₃ S ₆ Al color: white HYDROLYTIC SENSITIVITY: 4 no reaction with water under neutral conditions [85883-32-5] HMIS: 3-1-0-X	555.93	(210-225°)mp soluble: dichloromethane		10g/\$140.00
AKA060 ALUMINUM ETHOXIDE C ₆ H ₁₅ O ₃ Al slightly soluble: hot xylene HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [555-75-9] TSCA HMIS: 2-1-1-X	162.17	189°/3 (157-9°)mp molecular complexity: 4.1	1.142	25g/\$32.00 100g/\$104.00
AKA061 ALUMINUM ETHOXYETHOXY-ETHOXIDE, 15% in ethoxydiethyleneglycol C ₁₈ H ₃₉ O ₉ Al catalyst for depolymerization of polyesters to macrocyclic esters ^{1,2} . 1. J. Cahill et al, US Pat. 4,709,058, 1987 2. E. Harris, US Pat. 4,393,223, 1983 HYDROLYTIC SENSITIVITY: 7 reacts slowly with moisture/water [70815-16-6] TSCA HMIS: 2-1-1-X	426.47	miscible: methanol	1.01	50g/\$22.00 250g/\$88.00

**SURFACE
MODIFICATION**

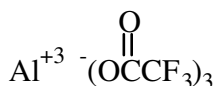


name	MW	bp/mm (mp)	D ₄ ²⁰	n _D ²⁰
CXAL075 ALUMINUM STEARATE ^{tech-90} C ₅₄ H ₁₀₅ O ₆ Al (~8% free stearic acid) gelling agent for mineral and vegetable oils; waterproofing agent suspension agent for pigments in inks and paints HYDROLYTIC SENSITIVITY: 4 no reaction with water under neutral conditions	877.42	(143-9°)mp	1.010	
[637-12-7] TSCA HMIS: 1-1-0-X	500g/\$14.00		2.5kg/\$56.00	



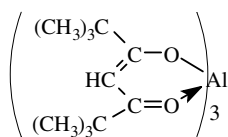
SIA0586.0 ALUMINUM SILICATE KAOLIN, calcined Al ₂ O ₇ Si ₂ •2H ₂ O particle size: 1-1.5μ HYDROLYTIC SENSITIVITY: 1 no significant reaction with aqueous systems	258.16		2.63	1.62
[1332-58-7] TSCA HMIS: 1-0-0-X	500g/\$12.00		5.0kg/\$72.00	

**DIELECTRIC
CERAMIC**



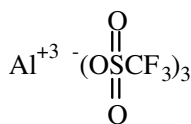
CXAL080 ALUMINUM TRIFLUOROACETATE, monohydrate C ₆ F ₉ O ₆ Al•H ₂ O intermediate for fluoride glasses ¹ . 1. C. Ruesel, J. Non-Crystalline Solids, 152, 161, 1993 HYDROLYTIC SENSITIVITY: 7 reacts slowly with moisture/water	366.03/384.04			
[36554-89-9] HMIS: 3-0-0-X	25g/\$120.00			

**DIELECTRIC
CERAMIC**



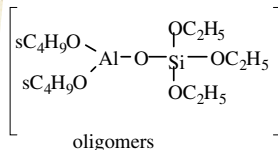
AKA085 ALUMINUM III 2,2,6,6-TETRAMETHYL- 3,5-HEPTANEDIONATE C ₃₃ H ₅₇ O ₆ Al decomposes: >340° HYDROLYTIC SENSITIVITY: 4 no reaction with water under neutral conditions	576.80	75°/0.02-sub (235°)mp		
[14319-08-5] HMIS: 2-1-0-X	1.0g/\$20.00		5.0g/\$80.00	

**DIELECTRIC
CERAMIC**

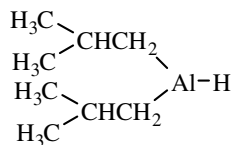


CXAL083 ALUMINUM TRIFLUOROMETHANE- SULFONATE ALUMINUM TRIFLATE C ₃ F ₉ O ₉ S ₃ Al HYDROLYTIC SENSITIVITY: 6 forms irreversible hydrate	474.18	(300°)mp hygroscopic		
[74974-61-1] HMIS: 3-0-0-X	10g/\$54.00			

**DIELECTRIC
CERAMIC**

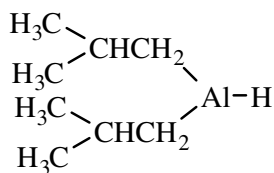


SID2780.0 DI-s-BUTOXYALUMINOXYTRIETHOXSILANE C ₁₄ H ₃₃ AlO ₆ Si name is for nominal structure- product is oligomeric oxoalkoxide flashpoint: 23°C(73°F) employed in sol-gel preparation of mullites ¹ . 1. J. Boilot, in "Better Ceramics Through Chemistry III" p121. HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents work under dry inert gases such as nitrogen or argon	352.48		1.0	1.422 ²⁵
[68959-06-8] TSCA HMIS: 2-4-1-X	25g/\$22.00		100g/\$72.00	

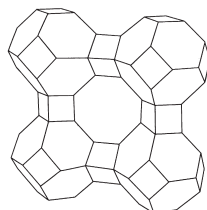
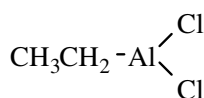
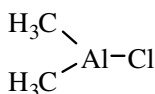


OMAL021.2 DIISOBUTYLALUMINUM HYDRIDE, 1M in heptane (19-20 wgt%) DIBAL-H C ₈ H ₁₉ Al reducing agent F&F 1, 260; 2,140; 3,101; 4, 158; 5, 224; 6, 198; 7,111; 8, 163; 9, 161; 10, 149; 11, 185; 12, 191; 15, 137 HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents	142.22	116-8°/1 (-80°)mp flashpoint: 2°C (34°F)	0.73	
[1191-15-7] TSCA HMIS: 3-4-1-X	1.5kg/\$210.00*			*includes zCYL-L-2400

PLEASE INQUIRE ABOUT BULK QUANTITIES



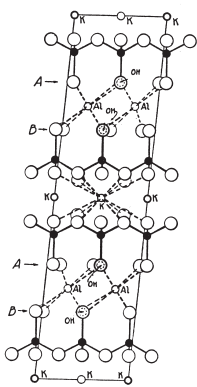
DIELECTRIC CERAMIC



Face of cubic array of truncated octahedra w/ alternating Si and Al atoms at vertices

name	MW	bp/mm (mp)	D ₄ ²⁰	n _D ²⁰
OMAL021.5 DIISOBUTYLALUMINUM HYDRIDE, 1M in tetrahydrofuran (19-20 wgt%) <i>DIBAL-H</i> C ₈ H ₁₉ Al reducing agent F&F 1, 260; 2,140; 3,101; 4, 158; 5, 224; 6, 198; 7,111; 8, 163; 9, 161; 10, 149; 11, 185; 12, 191; 15, 137 HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [1191-15-7] TSCA HMIS: 3-4-1-X	142.22	116-8°/1 flashpoint: -17°C (1°F)	0.866	
OMAL020 DIMETHYLALUMINUM CHLORIDE C ₂ H ₆ ClAl HYDROLYTIC SENSITIVITY: 10 reacts extremely rapidly with moisture and oxygen pyrophoric- glove box or sealed system required [1184-58-3] TSCA HMIS: 3-4-2-X	92.51	126-7° (-21°)mp PYROPHORIC	0.996	
OMAL033.2 ETHYLALUMINUM DICHLORIDE, 1M in heptane (24-26 wgt%) C ₂ H ₅ Cl ₂ Al HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [563-43-9] TSCA HMIS: 3-4-1-X	126.95	203° (31°)mp	0.73	
INLI009 LITHIUM ALUMINUM HYDRIDE, pellets H ₄ AlLi reducing agent, source for alane derivatives HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [16853-85-3] TSCA HMIS: 4-3-2-X	37.95	decomposes >130°	0.920	
SIL6466.0 LITHIUM ALUMINUM SILICATE <i>α-SPODUMENE</i> AlLiO ₇ Si ₂ upon heating converts to eucryptite w/ negative thermal expansion coefficient: -8.5 x 10 ⁻⁶ lowers melt temperature of glasses and glazes [12068-40-5] TSCA HMIS: 1-0-0-X	202.09	hardness, Mohs: 6-7	2.65	
SIM6593.0 MOLECULAR SIEVES, 3A, powder K ₉ Na ₃ [(AlO ₂) ₁₂ (SiO ₂) ₁₂] • 27 H ₂ O nominal pore diameter: 3Å equilibrium water absorption, 55% RH: 22% absorbs water and ammonia, excludes ethane dries polar liquids such as methanol, ethanol, propylene HYDROLYTIC SENSITIVITY: 5 forms reversible hydrate [63231-69-6] TSCA HMIS: 1-0-0-X				1kg/\$60.00
SIM6594.0 MOLECULAR SIEVES, 4A, powder ZEOLITE A Na ₁₂ [(AlO ₂) ₁₂ (SiO ₂) ₁₂] • 27 H ₂ O nominal pore diameter: 4Å equilibrium water absorption, 55% RH: 22% absorbs di-n-butylamine, excludes tri-n-butylamine dries liquids such as acetone, DMF, DMSO, pyridine HYDROLYTIC SENSITIVITY: 5 forms reversible hydrate [70955-01-0] TSCA HMIS: 1-0-0-X				1kg/\$60.00

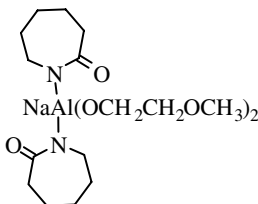
name	MW	bp/mm (mp)	D ₄ ²⁰	n _D ²⁰
SIM6594.7 MOLECULAR SIEVES, 13X, powder FAUJASITE Na ₈₆ [(AlO ₂) ₈₆ (SiO ₂) ₁₀₆] • x H ₂ O nominal pore diameter: 10A equilibrium water absorption, 55% RH: 28% removes mercaptans from hydrocarbons HYDROLYTIC SENSITIVITY: 5 forms reversible hydrate				
[12173-28-3] TSCA HMIS: 1-0-0-X		1kg/\$60.00		



SIM6594.9 MUSCOVITE, POTASSIUM MICA K ₂ O·3Al ₂ O ₃ ·6SiO ₂ ·2H ₂ O	760.62/796.65	2.77-2.88	1.55-1.61	
hardness, Mohs: 2.5-3.0 50 micron average particle size dielectric constant: 6.0-6.6 forms composites or, after exfoliation, nanocomposites HYDROLYTIC SENSITIVITY: 1 no significant reaction with aqueous systems				
[12001-26-2] TSCA HMIS: 1-0-0-X		500g/\$19.00		

SIP6827.7 PHLOGOPITE MAGNESIUM MICA KMg ₃ [AlO(SiO ₃) ₃](F,OH) specific heat: 0.21 cal/g° HYDROLYTIC SENSITIVITY: 1 no significant reaction with aqueous systems		(>1500°)mp	2.8	
hardness, Mohs: 2.5-3.5 average particle size: 50 microns				
[12251-00-2] TSCA HMIS: 1-0-0-X		100g/\$19.00		

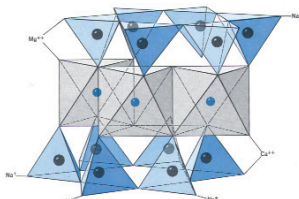
POLYMERIZATION



AKS725.5 SODIUM ALUMINUM DICAPROLACTAM BIS(2-METHOXYETHOXIDE), 80% in toluene C ₁₈ H ₃₄ N ₂ O ₆ AlNa soluble: aromatic and aliphatic hydrocarbons initiates bulk polymerization of caprolactam at 0.3 mole % w/acetylcaprolactam at 150-170° HMIS: 3-3-1-X	424.45	(225°)-d. (-20°)mp flashpoint: 21°C(69°F)	1.11	
viscosity: 1500-2000 cSt. 25g/\$48.00				



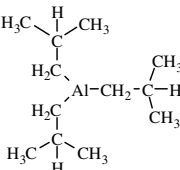
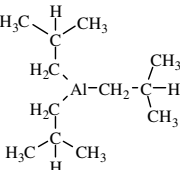
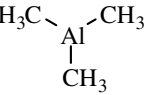
AKS726 SODIUM ALUMINUM HYDRIDE BIS-(METHOXYETHOXIDE), 70% (3.4M) in toluene C ₆ H ₁₆ O ₄ AlNa intermediate for ion conducting network polymers ¹ . reducing agent ² . 1. K. Doan et al Chem. Mater. 3, 418, 1991. 2. Tetrahedron Lett., 3303, 1968. HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents work under dry inert gases such as nitrogen or argon	202.16	flashpoint: 4°C (40°F)	1.036	
[22722-98-1] TSCA HMIS: 3-4-1-X		25g/\$13.00		100g/\$45.00



Three-layer Clay Particle

SIS6985.0 SODIUM MONTMORILLONITE CLAY (Na,0.5Ca) _{0.7} (Al,Mg,Fe) ₄ (Si,Al ₈)O ₂₀ (OH) ₄ • nH ₂ O surface area: >750m ² /g pillared, interlayered clay- may be exfoliated for composite and catalyst applications ¹ . 1. A Gil et al. Catalysis Rev. 42, 145, 2000			2-3	
[1318-93-0] TSCA HMIS: 1-0-0-X		100g/\$10.00		2kg/\$39.00

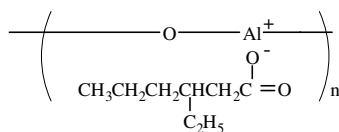
PLEASE INQUIRE ABOUT BULK QUANTITIES

	name	MW	bp/mm (mp)	D ₄ ²⁰	n _D ²⁰
(C ₄ H ₉ O) ₃ AlAl(C ₂ H ₅) ₃	OMAL077 TRIETHYL(TRI-s-BUTOXY)DIALUMINUM tech-90 C ₁₈ H ₄₂ O ₃ Al ₂ contains diethyl(tetra-s-butoxy)dialuminum non-pyrophoric precursor for CVD of aluminum oxide	360.49	183-6°/40		
	HYDROLYTIC SENSITIVITY: 9 reacts extremely rapidly with moisture and oxygen glove box or sealed system required HMIS: 3-4-2-X		25g/\$120.00		
	OMAL082 TRIIISOBUTYLALUMINUM C ₁₂ H ₂₇ Al	198.33	73°/5 (4°)mp	0.781	1.4494
	PYROPHORIC viscosity, 20°: 3 cSt precursor for MOCVD of aluminum catalyst for the coupling of α-olefins to substituted vinylidines ¹ . 1. B. Arkles, US Pat. 5,874,603, 1999. HYDROLYTIC SENSITIVITY: 10 reacts extremely rapidly with moisture and oxygen may be pyrophoric- glove box or sealed system required [100-99-2] TSCA HMIS: 4-4-2-X		vapor pressure, 50°: 0.92mm 100g/\$70.00 + cylinder or bubbler		
	OMAL082.2 TRIIISOBUTYLALUMINUM, 1M in heptane C ₁₂ H ₂₇ Al (25-28 wgt%)	198.33		0.72	
	HYDROLYTIC SENSITIVITY: 8 reacts rapidly with moisture, water, protic solvents [100-99-2] TSCA HMIS: 3-4-1-X		1.5kg/\$280.00* *includes zCYL-L-2400		
	OMAL086.2 TRIMETHYLALUMINUM, 2M in heptane C ₃ H ₉ Al	72.09	125-6° (15°)mp	0.69	
	F&F: 8, 506; 15, 341; 17, 372 HYDROLYTIC SENSITIVITY: 9 reacts extremely rapidly with moisture and oxygen glove box or sealed system required [75-24-1] TSCA HMIS: 3-4-1-X		250g/\$110.00 1.5kg/\$320.00* *includes zCYL-L-2400		

DOUBLE METAL AND POLYMERIC ALKOXIDES

Double metal alkoxides are metal alkoxides with two metal atoms within each molecular species. The double metal alkoxides offered by Gelest are all liquids. In order to avoid crystallization which can lead to non-homogeneous film formation, they usually contain two or more alcohol species. The formulations have been developed to allow ease of handling in sol-gel and coating applications.

name	empirical formula	metal content	metal ratio	density
DALCU65 ALUMINUM COPPER (0.67 M)	$Al_2Cu(OR)_x$	3.6-3.9% Al 4.2-4.5% Cu	2:1 Al:Cu	0.94-0.97
	HMIS: 2-3-1-X	25g/\$36.00		100g/\$116.00
DALTI50 ALUMINUM TITANIUM (0.85M)	$Al_2Ti(OR)_x$	4.5-4.7% Al 4.0-4.2% Ti	2:1 Al:Ti	0.98-1.00
	HMIS: 2-3-1-X	100g/\$25.00		500g/\$96.00
DALYO80 ALUMINUM YTTRIUM	$Al_3Y(OR)_x$	4.4-4.6% Al 4.8-5.0% Y	3:1 Al:Y	
	HMIS: 2-3-1-X	25g/\$34.00		100g/\$110.00
DALZR50 ALUMINUM ZIRCONIUM (0.67 M)	$Al_2Zr(OR)_x$	3.6-3.8% Al 6.0-6.2% Zr	2:1 Al:Zr	0.98-0.99
	HMIS: 2-3-1-X	100g/\$29.00		500g/\$116.00
DMGAL30 MAGNESIUM ALUMINUM (0.75 M)	$MgAl_2(OR)_x$	1.7-1.9% Mg 3.9-4.1% Al	1:2 Mg:Al	0.94-0.95
	HMIS: 2-3-1-X	25g/\$18.00		100g/\$59.00
DMGAL50 MAGNESIUM ALUMINUM (1.0 M)	$MgAl(OR)_x$	2.3-2.5% Mg 2.6-2.8% Al	1:1 Mg:Al	0.94-0.96
	HMIS: 2-3-1-X	25g/\$18.00		100g/\$59.00
PAL-008 POLY(OXOALUMINUM 2-ETHYLHEXANOATE), 60% in isopropyl-2-ethylhexanoate ($C_8H_{15}AlO_3$) _n		8-9% Al		1.01
		flashpoint: 88°C (190°F)		
		forms alumina films, gelling agent for inks		
	[56237-74-2] TSCA	HMIS: 1-2-1-X	25g/\$19.00	100g/\$62.00
PSIAL-007 DIETHOXYSILOXANE -s-BUTYLALUMINATE copolymer sol-gel intermediate for aluminum silicates ¹ .		7.5-8.5% Al 6.6-7.6% Si		0.90-1.00
	1. J. Boilot in "Better Ceramics Through Chemistry III, p121 [68959-06-8] TSCA		100g/\$38.00	500g/\$152.00



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